ORIGINAL

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BEFORE THE ARIZONA CORPORATION

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AZ CORP COMMISSION
DOCKET CONTROL

DOUG LITTLE, Chairman
BOB STUMP
BOB BURNS
TOM FORESE
VACANT

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY TO EXTEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY IN CASA GRANDE, PINAL COUNTY, ARIZONA	Docket No. W-01445A-03-0559 **ARIZONA WATER COMPANY'S NOTICE OF FILING SURREBUTTAL TESTIMONY AND ASSOCIATED EXHIBITS**

Arizona Water Company hereby gives notice of filing the surrebuttal testimony of William M. Garfield (attached as Exhibit A) and Fredrick K. Schneider (attached as Exhibit B), as well as the expert surrebuttal testimony of Rita P. Maguire, Esq. (attached as Exhibit C) and Paul Walker (attached as Exhibit D).

DATED this 11th day of January, 2016.

BRYAN CAVE LLP

By _____

Steven A. Hirsch
Coree E. Neumeyer
Two N. Central Avenue, Suite 2200
Phoenix, AZ 85004-4406
Attorneys for Arizona Water Company

Arizona Corporation Commission
DOCKETED
JAN 11 2016
DOCKETED BY

Bryan Cave LLP
Two North Central Avenue, Suite 2200
Phoenix, Arizona 85004-4406
(602) 364-7000

ORIGINAL and 13 copies filed this 11th day of January, 2016, with:

Docket Control
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

COPY of the foregoing hand-delivered this 11th day of January, 2016, to:

Janice Alward, Chief Counsel
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Arizona Corporation Commission
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Phoenix, AZ 85007

Thomas M. Broderick, Director
Utilities Division
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

Chief Administrative Law Judge
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

COPY of the foregoing mailed and e-mailed this 11th day of January, 2016, to:

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Lisa Bemus

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Exhibit A

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

DOUG LITTLE - Chairman
BOB STUMP
BOB BURNS
TOM FORESE
ANDREW TOBIN

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY FOR AN EXTENSION OF ITS CERTIFICATE OF CONVENIENCE AND NECESSITY AT CASA GRANDE, PINAL COUNTY, ARIZONA	**DOCKET NO. W-01445A-03-0559**

Surrebuttal Testimony

of

William M. Garfield

(Hearing on Remand - Phase II)

ARIZONA WATER COMPANY

Surrebuttal Testimony of

William M. Garfield

I. **Introduction and Background.**

Q. PLEASE STATE YOUR NAME, EMPLOYER AND OCCUPATION.

A. My name is William M. Garfield. I am employed by Arizona Water Company as President and Chief Operating Officer.

Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY IN THIS PROCEEDING?

A. Yes. In 2006, I filed testimony in this proceeding addressing Arizona Water's request for an extension of time to comply with certain conditions of its Certificate of Convenience and Necessity ("CCN") granted in Decision No. 66893, dated April 6, 2004.[1] In 2008, I filed testimony in this proceeding addressing Arizona Water's continued willingness and ability to provide water utility service within its CCN area, including the Cornman Tweedy property.[2] In 2014, I filed direct testimony in this proceeding addressing Arizona Water's ability to provide both water and wastewater services, if needed, and the adequacy, sufficiency and reasonableness of Arizona Water's provision of public utility water service to its CCN area.[3]

Q. ARE YOU ADOPTING ANY OF YOUR EARLIER PREFILED TESTIMONY AT THIS TIME?

A. Yes. I adopt all of my previous testimony in this matter.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY IN THIS MATTER?

---

[1] Direct testimony filed on June 12, 2006; rebuttal testimony filed on July 6, 2006.
[2] Direct testimony filed on January 4, 2008; rebuttal testimony filed on February 5, 2008.
[3] Direct testimony filed on May 30, 2014.

A. The purpose of my surrebuttal testimony is to provide testimony and evidence in response to the written testimony of Cornman Tweedy witnesses Ernest Johnson, Steve Soriano and Fred Goldman.

II. The Remand Proceeding is a Deletion Proceeding and not a Comparison of Two Competing Water Providers.

Q. WHAT IS YOUR UNDERSTANDING OF THE PURPOSE OF THIS REMAND PROCEEDING?

A. The specifically stated purpose for this remand proceeding "will be for the purpose of considering whether the Cornman property should be deleted from the CC&N extension granted to Arizona Water by Decision No. 66893."[4] In addition, pursuant to Procedural Order dated February 10, 2011 by then Assistant Chief Administrative Law Judge Dwight D. Nodes, the Commission sent the matter back to the Hearing Division for further proceedings to determine "whether a public service corporation, like Arizona Water, in this water challenged area and under the circumstances presented in this case, is providing reasonable service if it is not able or not willing to provide integrated water and wastewater services."[5]

Q. ARE THERE COMPETING APPLICATIONS FOR WATER SERVICE IN THIS PROCEEDING?

A. No, there are not. Although Picacho Water Company filed an application to extend its CCN to serve the Cornman Tweedy property on April 14, 2005, it subsequently withdrew its application on June 26, 2006 after Chief Administrative Law Judge Lyn Farmer in her March 22, 2006 Procedural Order stated that "The hearing will not be a reopening of the Decision

[4] See Finding of Fact 102 in Decision No. 69722.
[5] See Page 2, lines 6-10, February 10, 2011 Procedural Order.

granting Arizona Water a CC&N and will not address whether a different water utility should be providing service to the extension area."[6]

III. Reasonable Water Service Requires Good Water Management Strategies.

Q. HOW DO YOU ANSWER THE QUESTION OF WHETHER A PUBLIC SERVICE CORPORATION IS PROVIDING REASONABLE SERVICE IF IT IS UNABLE OR UNWILLING TO PROVIDE INTEGRATED WATER AND WASTEWATER SERVICES?

A. First, as I stated in my direct testimony, Arizona Water Company is ready, willing and able to provide integrated water and wastewater services. But even if a public service corporation is unable or unwilling to provide so-called integrated service, it can still provide reasonable service.

Q. HOW WOULD A PUBLIC SERVICE CORPORATION PROVIDE REASONABLE SERVICE?

A. I base my testimony on a key phrase in this Phase 2 Remand, "in this water challenged area." The Pinal Active Management Area ("AMA") has a long history of groundwater overdraft, the evidence of which is seen through declining groundwater levels and land subsidence. The importance, therefore, of the phrase "water challenged area" is how one deals with water supply challenges by implementing good water management strategies.

The use of renewable supplies of Central Arizona Project ("CAP") water through direct deliveries and groundwater recharge in the Pinal AMA since the 1980s helped to stabilize the area's water supplies. Even with rising water use from the mid 1980s through

[6] See Page 6, lines 9-11, March 22, 2006 Procedural Order.

2010, the challenges to the area's water supplies were satisfactorily addressed through the effective use and management of CAP water.[7]

Q. AS A PUBLIC SERVICE CORPORATION, HOW DOES ARIZONA WATER COMPANY MANAGE ITS WATER SUPPLIES TO CONSERVE LIMITED GROUNDWATER SUPPLIES IN THE CORNMAN TWEEDY AREA?

A. In addition to Arizona Water Company's effective water conservation strategies, which reduced average per capita residential water use by over 40% since 1996, we have implemented a plan to use nearly 11,000 acre-feet of our CAP water allocations through underground recharge, storage and recovery operations. For 2015 alone, Arizona Water Company recharged 5,000 acre-feet of CAP water, reducing its use of groundwater by 30%. Arizona Water will recharge 6,000 acre-feet of CAP water in 2016, further reducing its reliance on groundwater. Arizona Water will increase its use of CAP water through recharge, storage and recovery until all of our CAP supplies are fully used to further reduce our reliance on groundwater. In this way, Arizona Water Company is providing reasonable service and addressing the area's water challenges, applying best management practices to effectively manage its water supplies, thereby reducing groundwater use and moving to more renewable and more sustainable water supplies.

Q. DO INTEGRATED WATER AND WASTEWATER UTILITIES ADOPT THE SAME BEST MANAGEMENT PRACTICES?

A. Many do but some do not. For example, Robson's Pima Utilities Company (the developer-owned utility that serves Sun Lakes) reported to ADWR in its 2014 Annual Water Withdrawal and Use Report Provider Summary, that it delivered 719.79 acre-feet of effluent to golf courses. Pima Utilities Company did not use all of its available effluent and instead

[7] See Arizona Water Company's Central Arizona Project Water Use Plans for Pinal Valley and White Tank 2015 Update, attached to Fred Schneider's surrebuttal testimony as Exhibit FKS-12.

stored 522.68 acre-feet of effluent. Although its total groundwater withdrawals for 2014 exceeded 5,500 acre-feet, Pima Utilities Company did not use available effluent to offset use of groundwater which it could have done through effluent recovery.

Q. WHY IS THIS IMPORTANT TO THIS PROCEEDING?

A. Because the Cornman Tweedy witnesses have characterized Robson Communities Sun Lakes development as the "model" of what integrated water and wastewater utilities can achieve. Even though Pima Utilities Company had the ability to recover effluent to offset its use of groundwater (according to ADWR records Pima Utility Company held 3,245.53 acre-feet of effluent storage credits as of 12/31/2013), it did not do so.[8] Instead, it pumped or delivered groundwater to four golf courses totaling nearly 2,300 acre-feet for 2014. Total water use for turf was as much as all of Pima Utilities Company's other customers combined. In fact, barely 20% of the turf demand for Sun Lakes at full build out was met with effluent. That is hardly sustainable or responsible, with 80% of the water supplies for turf coming from Pima Utility Company's continued reliance on mined groundwater. Sound water management strategies call for full use of recovered effluent to offset the use of groundwater.

Q. DO YOU HAVE OTHER EXAMPLES OF PUBLIC SERVICE CORPORATIONS THAT HAVE NOT IMPLEMENTED SOUND WATER MANAGEMENT STRATEGIES?

A. Yes, Robson's Quail Creek Water Company in the Tucson AMA. Quail Creek Water Company is a water-only utility. It reported groundwater withdrawals of 624.86 acre-feet for 2014, and reports receiving 1,496.20 acre-feet of effluent received from other rights and 80.65 acre-feet of groundwater delivered to a Type-1 groundwater right holder.[9] 1,496.20 acre-feet of effluent was sent to a recharge facility permitted under the name Robson Ranch

[8] See Pima Utilities Company's Annual Water Withdrawal and Use Report Provider Summary for 2014 attached as Exhibit WMG-3.

[9] See Quail Creek Water Company's Annual Water Withdrawal and Use Report Provider Summary for 2014 attached as WMG-4

Quail Creek LLC. Robson reported no groundwater deliveries by Quail Creek Water Company to Robson's golf course at the Quail Creek Development, because the groundwater was provided by another Robson affiliate. No effluent was recovered to offset Quail Creek Water Company's use of groundwater or the Robson affiliate's use of groundwater for the golf course even though Robson Ranch Quail Creek LLC had 16,745.22 acre-feet of effluent in storage according to ADWR as of 12/31/2014.

Q. CAN YOU MAKE ANY CONCLUSIONS ABOUT ROBSON'S PIMA UTILITIES COMPANY AND QUAIL CREEK WATER COMPANY FROM THIS TESTIMONY?

A. I conclude that whether a utility provides integrated water and wastewater services is not as important as what a public service corporation does to manage its use of its available water supplies. Here, clearly Robson has the ability to offset its use of groundwater through stored effluent, but chooses not to. Picacho Water Company, another Robson affiliate, follows the same flawed model and has not offset its use of groundwater with recovered effluent. In a water challenged area, one with a history of groundwater overdraft and land subsidence, I find it unreasonable that public service corporations like Robson's that have the ability to offset groundwater use with stored effluent fail to do so.

Q. IS THERE STATE POLICY ON THE USE OF CAP WATER OR EFFLUENT TO OFFSET GROUNDWATER USE?

A. Yes. The State of Arizona has longstanding, established policy on water storage, water savings and replenishment, as codified in Arizona Revised Statutes ("A.R.S.") § 45-801.01, which states:

> *The public policy of this state and the general purpose of this chapter are to:*
>
> *1. Protect the general economy and welfare of this state by encouraging the use of renewable water supplies, particularly this state's entitlement to Colorado River water, instead of groundwater through a flexible and effective regulatory program for the underground storage, savings and replenishment of water.*

> *2. Allow for the efficient and cost-effective management of water supplies by allowing the use of storage facilities for filtration and distribution of surface water instead of constructing surface water treatment plants and pipeline distribution systems.*

In addition, Arizona's Groundwater Management Act as codified in A.R.S. § 45-401(B) states:

> *"It is therefore declared to be **the public policy of this state** that in the interest of protecting and stabilizing the general economy and welfare of this state and its citizens it is **necessary to conserve, protect and allocate the use of groundwater resources of the state** and to provide a frame work for the comprehensive management and regulation of the withdrawal, transportation, conservation and conveyance of rights to use the groundwater in this state."*

Fulfilling those stated public water management policies requires water providers like Arizona Water Company to implement actual operations like recharging, storing and recovering CAP water, which is sound water management practice. It is especially important to do so in water challenged areas like Casa Grande where Cornman Tweedy's property is located, as Arizona Water Company already does. Robson and their affiliates do not do so, but instead base their use of effluent on what saves Robson the most money. An example of this behavior is Robson's SaddleBrooke Ranch Development. Arizona Water has chosen to go above and beyond bare minimum legal requirements to reduce groundwater pumping in the Pinal AMA by utilizing its renewable CAP supplies. In contrast, Robson's customers deserve more from a public service corporation than the half measures that Robson's captive utilities offer here, that are in Robson's best interest in any event. Customers deserve to have their interests put first, not last.

Q. PLEASE EXPLAIN FURTHER ABOUT ROBSON'S SADDLEBROOKE RANCH DEVELOPMENT AND HOW IT IS GERMANE TO THIS PROCEEDING.

A. Arizona Water Company provides water utility service to Robson's SaddleBrooke Ranch development. Robson's Mountain Pass Utility provides wastewater service. The entire

development, including the golf course, is enrolled as member lands in the Central Arizona Groundwater Replenishment District, and as such, any groundwater delivered to the golf course must be replenished. The cost to replenish groundwater in the Tucson AMA as of 2015 is $615 per acre-foot.[10]

Robson Ranch Mountains LLC is the Robson affiliate that owns the golf course at the SaddleBrooke Ranch development. Robson Ranch Quail Creek LLC assigns effluent credits that it has accumulated in Robson's Quail Creek development so that Robson does not have to pay to replenish groundwater for its golf course.

Robson ignores the public interest of its SaddleBrooke Ranch and Quail Creek utility customers, instead using those resources to save Robson money. While SaddleBrooke Ranch and Quail Creek utility customers could benefit from the use of stored effluent to offset the use of continued mining of groundwater, and in many cases, the $615 per acre-foot replenishment cost, Robson chooses not to do so. That may benefit Robson's private proprietary golf course, but it does nothing to implement good water management practice and it does nothing to benefit Robson's Mountain Pass Utility or Quail Creek Water Company ratepayers. The public interest is not served by Robson's actions, which is what utility customers expect from public utility service providers. Again, it's not whether you are integrated or not, it's how you manage the beneficial use of available, but scarce, water resources and do so in line with prevailing Arizona public water policies.

Q. CAN YOU CITE ANY EXAMPLES OF NON-INTEGRATED WATER AND WASTEWATER SERVICE PROVIDERS THAT USE BEST WATER MANAGEMENT PRACTICES?

[10] See Central Arizona Groundwater Replenishment District Final 2015/16 Rate Schedule attached as WMG-5.

A. Yes. Tucson Water, a municipally-owned water utility provides water service and Pima County Wastewater provides wastewater service to the greater Tucson area.[11] In Tucson's case, two separate service providers have adopted best water management practices in two key ways: i) through the use of effective conservation measures, and ii) through effective collaboration of the direct delivery and recharge of effluent and through storage and recovery of effluent and CAP water. As a result of the collaboration, Tucson Water and Pima County Wastewater, Tucson Water has significantly offset its use and reliance on mined groundwater through recharge and recovery. Keep in mind, 25 years ago Tucson was once known as the nation's largest city that relied solely upon groundwater.

Even though neither Tucson Water nor Pima County Wastewater are "integrated water and wastewater service providers" they have a comprehensive and effective water management strategy to reduce the use of mined groundwater. The public, not just Tucson Water and Pima County Wastewater, has directly benefited from these best water management practices. Tucson offsets its use of groundwater by recharging CAP water and effluent, thereby reducing its use of mined groundwater by 90% since 1984. In the Casa Grande area, Arizona Water is implementing the same best water management practices that have succeeded in Tucson.

Q. HOW CAN THIS HELP THE COMMISSION TO DEFINE WHAT CONSTITUTES REASONABLE SERVICE?

A. In the context of "water challenged areas," cutting back on the mining of local groundwater supplies through recharge, storage and recovery is reasonable service, whether integrated or not. Arizona Water is reducing the mining of local groundwater supplies.

[11] See Tucson's 2012 Update Water Plan: 2000-2050, Section 3, attached as WMG-6.

IV. Arizona Water Company is ready, willing, and able to provide both water and wastewater services where an established wastewater service provider does not already exist.

Q. DO YOU AGREE WITH CORNMAN TWEEDY WITNESS JOHNSON THAT ARIZONA WATER COMPANY HAS USED A DIFFERENT BUSINESS MODEL THAN THE INTEGRATED WATER AND WASTEWATER SERVICES MODEL AND THAT IT HAS RESISTED PROVIDING WASTEWATER SERVICE?

A. No, Mr. Johnson is wrong. Arizona Water Company has not needed to provide both water and wastewater services in its CCN extension areas because in each case a long-established wastewater provider was available to provide wastewater service. Contrary to Mr. Johnson's rebuttal testimony that Arizona Water "has resisted providing wastewater service in Arizona," Arizona Water actively pursued providing both water and wastewater service to the Golden Valley South and the Villages at White Hills developments outside of Kingman, Arizona to take over Perkins Mountain Water Company and Perkins Mountain Utility Company[12]. Although the developer selected another utility, the fact remains that Arizona Water actively pursued both forms of utility service.

Q. CAN YOU PROVIDE ANY EXAMPLE OF WHERE THE COMMSSION DETERMINED THAT IT WAS IN THE PUBLIC INTEREST FOR ARIZONA WATER TO EXTEND ITS CCN FOR WATER SERVICE AND ANOTHER WASTEWATER UTILITY TO PROVIDE WASTEWATER SERVICE IN SUCH CCN AREA?

A. Yes. In Docket No. W-01445A-06-0199 et al., the Commission approved an extension of Arizona Water totaling 19,972 acres or 31.2 sections where Palo Verde Utility was the wastewater service provider. In that case, the Commission found in Finding of Fact Number

[12] See Johnson rebuttal testimony, page 16, lines 5-7.

11 that "We (the Commission) agree with the guidelines recommended by Staff in this case...with respect to approving CC&N extensions...in which the utilities are proposing to provide both water and wastewater service either through integrated service (in the case of the Global) or through cooperative arrangement (with AWC providing water and Global providing wastewater)....)"[13]

Q. CONCERNING THE COOPERATIVE ARRANGEMENT THE COMMISSION REFERENCED, HOW WAS THIS DOCUMENTED?

A. The Settlement Agreement between Arizona Water provided three key elements to the cooperative agreement:

i) Global was required to supply reclaimed water to Arizona Water to be sold and delivered by Arizona Water within its CCN and Planning Area;

ii) Global and Arizona Water would work cooperatively in connection with Global's efforts to provide wastewater service within the western part of Arizona Water's CCN and Planning Area; and

iii) The Managers of Arizona Water and Global Water would meet as required to exchange information and coordinate the provision of service where they both provide utility service.[14]

Q. CAN YOU PROVIDE AN EXAMPLE OF WHERE THE COMMISSION APPROVED AN AGREEMENT TO PROVIDE RECLAIMED WATER BETWEEN ARIZONA WATER AND A WASTEWATER SERVICE PROVIDER?

A. Yes. The Commission approved a Reclaimed Water Agreement between Arizona Water, Gold Canyon Sewer Company and Superstition Mountain Investment, Ltd. in Decision No. 56631 on September 14, 1989. Since that date, Arizona Water has worked closely with Gold

[13] See Decision No. 73146, Page 39, lines 1-6, Finding of Fact Number 122

[14] See Decision No. 73146, Exhibit A, Page 7, Sections 7a and b, and Section 8. See also WMG-1 attached to my Direct Testimony filed on May 30, 2014.

Canyon Sewer Company (now owned by Liberty Utilities) to maximize the use of reclaimed water in Arizona Water's Superstition Division.[15]

Q. DO YOU HAVE OTHER EXAMPLES WHERE ARIZONA WATER USED RENEWABLE CAP SUPPLIES OR EFFLUENT TO REDUCE GROUNDWATER USE?

A. Yes. Since 1995, Arizona Water had provided CAP water to golf courses in the Gold Canyon area and as a direct result Arizona Water eliminated the use of mined groundwater to serve those golf courses.[16]

V. Arizona Corporation Commission has not adopted the view that integrated water and wastewater services are necessary to advance sustainability in water scarce regions of the state.

Q. IS CORNMAN TWEEDY WITNESS JOHNSON CORRECT IN HIS STATEMENT THAT THE COMMISSION HAS "COME TO THE SETTLED VIEW THAT INTEGRATED WATER AND WASTEWATER SYSTEMS ARE NECESSARY TO ADVANCE WATER SUSTAINABILITY IN SCARCE REGIONS OF THE STATE"?

A. No, he is wrong. The Commission has established no such "settled view" policy or requirement that integrated water and wastewater systems are necessary to advance water sustainability in water-scarce regions of the state.

In fact, as I state earlier, the Commission found that they agreed (in other words, they came to a settled view, conclusion or policy) that CCN extensions can be served by separate water and wastewater utilities coordinating and cooperating for such service. These findings from Decision No. 73146, which was decided in May 2012, reflects the more recent view of Commission policy.

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[15] See Arizona Water Company's Tariff No. RW-256, attached as WMG-7.

[16] For more information please see Arizona Water's Annual Reports filed with ADWR from 1990 to 1995 and from 1995 to 2010, available online at ADWR's website.

Q. HOW DOES THE COMMISSION OR ANY OTHER STATE AGENCY ESTABLISH REQUIREMENTS FOR REGULATED ENTITIES?

A. The Commission and other state agencies establish rules which are codified in the Arizona Administrative Code. The Arizona Administrative Code has the effect of law.

Q. DID THE COMMISSION MODIFY ANY RULES OR REGULATIONS THAT AFFECT CCN EXTENSIONS OR NEW CCNs SINCE IT DECIDED THE WOORDRUFF AND PERKINS MOUNTAIN CCN CASES?

A. Yes, they did. The Commission adopted new rules for water and wastewater CCNs in 2010.

Q. DID THESE NEW RULES ADOPT THE "SETTLED VIEW" OR POLICY THAT MR. JOHNSON CLAIMS THE COMMISSION HAS EMBRACED?

A. No, they did not. There is no requirement in the Commission's rules requiring integrated water and wastewater utilities to serve new CCNs or CCN extensions nor is there any prohibition or restriction on separate water or wastewater utilities serving such areas.[17]

VI. The Commission may adopt rules or order Arizona Water Company and Picacho Sewer Company to cooperate to provide reclaimed water service but there is no basis for deleting Arizona Water Company's CCN.

Q. IF THE COMMISSION ORDERS ARIZONA WATER COMPANY AND PICACHO SEWER COMPANY TO COOPERATE TO PROVIDE RECLAIMED WATER SERVICE TO THE CORNMAN TWEEDY PROPERTY, IS ARIZONA WATER COMPANY PREPARED TO DO SO?

A. Yes, Arizona Water would certainly do so because as I testified above, we have already adopted such best management practices in working cooperatively with Global Water-Palo

[17] See Arizona Administrative Codes R14-2-402 and R14-2-602.

Verde to coordinate water and wastewater services in the Maricopa-Stanfield area. We have similarly done so with Gold Canyon Sewer Company. That is our business model.

Q. IF THE COMMISSION DECIDES THAT REASONABLE SERVICE REQUIRES THAT ONE ENTITY PROVIDE BOTH WATER AND WASTEWATER SERVICE TO THE CORNMAN TWEEDY PROPERTY, IS THAT A BASIS TO DELETE ARIZONA WATER COMPANY'S CCN?

A. No, it would not be a basis to delete Arizona Water Company's CCN. A.R.S. §40-321(A), states:

> *"When the commission finds that the equipment, appliances, facilities or service of any public service corporation, or the methods of manufacture, distribution, transmission, storage or supply employed by it, are unjust, unreasonable, unsafe, improper, inadequate or insufficient, the commission shall determine what is just, reasonable, safe, proper, adequate or sufficient, and shall enforce its determination by order or regulation."*

This statute provides that the Commission shall determine what is reasonable and shall enforce such determination by order or regulation, but says nothing of deletion. As stated in my earlier direct testimony, lacking any such order or regulation if the Commission decides that reasonable service requires that one entity provide both water and wastewater service to the Cornman Tweedy property, Arizona Water Company is ready, willing and able to do so and will request the Commission to delete Picacho Sewer Company's wastewater CCN for the Cornman Tweedy property and grant Arizona Water a wastewater CCN. In such an event, Arizona Water Company will also seek and obtain all necessary approvals from other regulatory agencies to provide wastewater service to the Cornman Tweedy property.

Q. DOES THIS COMPLETE YOUR SURREBUTTAL TESTIMONY?

A. Yes, it does.

ARIZONA WATER COMPANY/CORNMAN TWEEDY

EXHIBIT LIST

William M. Garfield

WMG-3	Pima Utilities Company's Annual Water Withdrawal and Use Report Provider Summary for 2014
WMG-4	Quail Creek Water Company's Annual Water Withdrawal and Use Report Provider Summary for 2014
WMG-5	Central Arizona Groundwater Replenishment District Final 2015/16 Rate Schedule
WMG-6	Tucson's 2012 Update Water Plan: 2000-2050, Section 3
WMG-7	Arizona Water Company's Reclaimed Water Service Tariff No. RW-256

EXHIBIT WMG-3

This is the original annual report for authority: 56-002031.0000

Note created: 4/2/2015

--- The document starts on the next page. ---

ARIZONA DEPARTMENT OF WATER RESOURCES, 3550 NORTH CENTRAL AVENUE, PHOENIX, AZ 85012-2105

ANNUAL WATER WITHDRAWAL AND USE REPORT
PROVIDER SUMMARY 2014

A 2
CER 1
D 1
EMNI 1
F1 1
G2 6
S 1
W1 4

OWNER OF GROUNDWATER RIGHT

PIMA UTILITIES COMPANY
ATTN: STEVE SORIANO
9532 E. RIGGS ROAD
SUN LAKES AZ 85248

RECEIVED
MAR 31 2015
ARIZONA DEPARTMENT OF WATER RESOURCES

REPORTING PARTY
56-002031.0000
PIMA UTILITIES COMPANY
ATTN: STEVE SORIANO
9532 E. RIGGS ROAD
SUN LAKES AZ 85248

TYPE OF RIGHT
LARGE MUNICIPAL PROVIDER MNPCCP

RIGHT / PERMIT NO.
56-002031.0000

PHOENIX AMA (602) 771-8585

ALLOTMENT: 1962.00 AF

If any of the information preprinted on this report is incorrect, please make the necessary changes.

PART I GROUNDWATER WITHDRAWN

From Box 10. Schedule A attached

5982.13 X $ 3.00 = $ 17946.39

ACRE - FEET X Withdrawal Fee =

PART II WATER DELIVERED TO OTHER RIGHTS

From Box 24 Schedule D attached

512.68 ACRE - FEET

PART III WATER RECEIVED FROM OTHER RIGHTS

Total from Schedule E attached

68.34 ACRE - FEET

PART IV LATE FEES

Complete if filing after March 31. NOTE: A portion of a month after March 31 is counted as a full month.

1) Enter number of months late (Maximum of 6)

2) $ Calculate Late Report Fee ($25.00 X number of months late)

3) $ Calculate Late Payment Fee (10 % X number of months late X withdrawal fee calculated in Part I

PART V TOTAL FEES DUE

Add amounts from Parts I and IV

$ 17946.39

Mail or hand deliver this report, together with the appropriate schedules, worksheets and fees to the Arizona Department of Water Resources. If mailed, the report must be mailed to P.O. Box 36020 Phoenix, AZ. 85067 and postmarked no later than March 31, 2015. If hand delivered, the report must be received by the Department's Annual Reports & Planning Section no later than 5:00 PM on March 31, 2015.

REPORTS FILED AFTER MARCH 31, 2015 ARE SUBJECT TO LATE FEES (A.R.S. § 45-632) AND PAYMENT OF PREVIOUSLY WAIVED MONETARY PENALTIES ASSOCIATED WITH PRIOR GROUNDWATER CODE VIOLATIONS.

I hereby certify, under penalty of perjury, that the information contained in this report is, to the best of my knowledge and belief, true, correct and complete.

X _____ GENERAL MANAGER 3/23/15
AUTHORIZED SIGNATURE TITLE DATE

STEVE SORIANO 4808955009
PRINTED NAME TELEPHONE NUMBER

NOTE: THIS REPORT MUST BE FILED EVEN IF NO WATER WAS DELIVERED PURSUANT TO THIS RIGHT.

ARIZONA DEPARTMENT OF WATER RESOURCES

SCHEDULE A

REPORT OF PUMPING

Owner

PIMA UTILITIES COMPANY

[1] **RIGHT/PERMIT/BMP Farm Unit NO.**

56-002031.0000

ANNUAL REPORT 2014

Note: Pumpage for each well must be shown on the attached well worksheets. Information for up to four wells may be shown on each worksheet.

[2] DWR WELL REGISTRATION NO.						[3] Depth to Static Water Level (Designated Providers Only)			[4]	RECOVERED WATER PUMPED				[9]
10 Q	40 Q	160 Q	LOCATION SEC	TWN	RNG	Date # 1 Date # 2	Msmt # 1 Msmt # 2	Well Running? (Y/N)	Ground-water Pumped	[5] CAP	[6] SW	[7] EFF/IN	[8] EFF/OUT	Total Water Pumped
55-211808 R1R3														
NW	NW	SW	30	2.0S	5.0E							14.76		14.76
55-514527 34														
SE	SE	SE	32	2.0S	5.0E				1060.76					1060.76
55-520891 27														
NW	NW	SW	28	2.0S	5.0E				345.09					345.09
55-554079 R1R1														
SW	NE	SW	30	2.0S	5.0E							20.14		20.14
55-561906 R1R4														
SW	NE	SE	29	2.0S	5.0E							8.90		8.90
55-561907 R1R2														
NW	SE	NW	29	2.0S	5.0E							8.95		8.95
55-566383 R1R5														
NE	NE	SE	29	2.0S	5.0E							15.59		15.59
55-566937 R1R6														
NW	NW	NE	29	2.0S	5.0E				804.26					804.26
TOTAL WATER WITHDRAWN (acre-feet) SUBTOTAL									[10*] 2210.02			69.34		[11**] 2278.36

* ENTER TOTAL ACRE-FEET OF GROUNDWATER WITHDRAWN IN PART I OF THE SUMMARY PAGE.

rev. 10/14

** ENTER ACRE-FEET OF TOTAL WATER PUMPED IN PART 4.D.1 OF THE SCHEDULE AWS.

ARIZONA DEPARTMENT OF WATER RESOURCES

SCHEDULE A

REPORT OF PUMPING

Owner

PIMA UTILITIES COMPANY

[1] **RIGHT/PERMIT/BMP Farm Unit NO.**

56-002031.0000

ANNUAL REPORT 2014

Note: Pumpage for each well must be shown on the attached well worksheets. Information for up to four wells may be shown on each worksheet.

[2] DWR WELL REGISTRATION NO.						[3] Depth to Static Water Level (Designated Providers Only)			[4] Ground-water Pumped	RECOVERED WATER PUMPED				[9] Total Water Pumped
10 Q	40 Q	160 Q	SEC	TWN	RNG	Date # 1 / Date # 2	Msmt # 1 / Msmt # 2	Well Running? (Y/N)		[5] CAP	[6] SW	[7] EFF/IN	[8] EFF/OUT	
55-625796 (29)														
NE	NE	NE	29	2.0S	5.0E				283.40					283.40
55-625797 (—)														
SE	NE	SE	20	2.0S	5.0E									
55-625798 (31)														
SE	SE	SE	31	2.0S	5.0E				733.00					733.00
55-625799 (32)														
SE	NE	NE	32	2.0S	5.0E				979.35					979.35
55-625800 (33)														
SE	SE	SW	32	2.0S	5.0E				897.25					897.25
55-806730 (33A)														
NE	NE	NE	30	2.0S	5.0E				860.17					860.17
TOTAL WATER WITHDRAWN (acre-feet) SUBTOTAL / TOTAL →									[10*] 3705.77 / 5913.79	- -	- -	108.34	- -	[11**] 3705.77 / 5982.13

* ENTER TOTAL ACRE-FEET OF GROUNDWATER WITHDRAWN IN PART I OF THE SUMMARY PAGE.

rev. 10/14 ** ENTER ACRE-FEET OF TOTAL WATER PUMPED IN PART 4.D.1 OF THE SCHEDULE AWS.

ARIZONA DEPARTMENT OF WATER RESOURCES

Owner

PIMA UTILITIES COMPANY

1 RIGHT/PERMIT/BMP Farm Unit NO.

56-002031.0000

SCHEDULE D

REPORT OF WATER DELIVERIES
TO OTHER WATER RIGHTS

ANNUAL REPORT 2014

2 RIGHT NO. DELIVERED TO / 3 TYPE OF RIGHT	4 DWR WELL NUMBER	5 CUSTOMER ACCOUNT NUMBER	6 FILING ON BEHALF	7 HOW MEASURED OR ESTIMATED	A ACRE-FEET DELIVERED BY TYPE OF WATER					TOTAL ACRE-FEET DELIVERED
					GW	CAP	EFF	SRP	Other SW	
73-560427.0001 WATER STORAGE PERMIT				metered			572.68			572.68
Note: If you delivered water to a storage facility, enter the amounts on a UWS - Schedule.			TOTAL ACRE-FEET DELIVERED		8 GW	9 CAP	10 EFF 572.68	11 SRP	12 Other SW	13 572.68

EXCHANGE WATER GIVEN

14 EXCHANGE NO. RECEIVING WATER	15 DWR WELL NO. IF APPLICABLE		B ACRE-FEET EXCHANGED BY TYPE OF WATER					TOTAL ACRE-FEET EXCHANGED
			GW	CAP	EFF	SRP	Other SW	
67-								
68-								
69-								
		TOTAL ACRE-FEET EXCHANGED	16 TOT. GW	17 TOT. CAP	18 TOT. EFF	19 TOT. SRP	20 TOT. O. SW	21
		ENTER BOX 22 IN PART II OF THE SUMMARY PAGE	TOTAL ACRE-FEET DELIVERED AND EXCHANGED				22 572.68	

SCHEDULE E Part A -- Municipal

ARIZONA DEPARTMENT OF WATER RESOURCES

Note: If any information pre-printed on this form is incorrect, please make the necessary corrections. For information not already pre-printed on this form, please follow the directions below.

WATER RECEIVED FROM OTHER SOURCES

Owner
PIMA UTILITIES COMPANY

RIGHT NO.
56-002031.0000

ANNUAL REPORT 2014

Part I -- Water Received from Primary Irrigation Districts / Municipal Providers

Irrigation District /Provider Number 74-547295.0001

Provider/District Name PIMA UTILITY COMPANY

Your District User/ Account Number

Number of acres eligible to receive surface water

Right / Permit Number Supplying Water	Measurement Method	Acre-feet Received by Water Type								
		Groundwater	In-lieu Groundwater	Decreed/ Appropri -ative	Normal Flow	Spillwater	CAP	Other	(Describe Other water)	Total Received
73-560477.0001	metered							EFFLUENT 108.34		108.34
Part I Total Acre-feet Received								108.34		108.34

Part II -- Water Received or Diverted from Sources Other Than Irrigation Districts / Municipal Providers

Right / Permit Number Supplying Water	Measurement Method	Acre-feet Received by Water Type							
		Groundwater	Decreed/ Appropri -ative	Normal Flow	Spillwater	CAP	Other	(Describe Other water)	Total Received
Part II Total Acre-feet Received									

PART III - Water Received Pursuant to a Permitted, Enrolled or Noticed Exchange Agreement

Exchange No. Supplying Water	Measurement Method	Exchange outside service area?	Payback for			Acre-feet Received in Exchange by Water Type					
			Quantity	Type	Year Given	GW	SRP	CAP	Effluent	Other SW	Total Received
67-											
68-											
69-											
Part III Total Acre-feet Received in Exchange											

Sch. E Part A Total acre-feet of Water Received or Diverted from Other Sources (Part I + Part II + Part III) 108.34

SCHEDULE E Part B -- Municipal

ARIZONA DEPARTMENT OF WATER RESOURCES

Note: If any information pre-printed on this form is incorrect, please make the necessary corrections. For information not already pre-printed on this form, please follow the directions below.

WATER DELIVERED TO STORAGE FACILITIES

OWNER PIMA UTILITY COMPANY

RIGHT NO. 59-002031.0000

ANNUAL REPORT 2014

Part I -- Water Delivered to Recharge / Storage Facilities on the Provider's Behalf

Right / Permit Number Supplying	Name of Entity Storing on Your Behalf	Measurement Method	Water Storage Permit Number (73-xxxxxx.xxxx)	Acre-feet Delivered to be Stored by Water Type						
				Salt/Verde	Plan 6	CAP	Effluent	Other	(Describe Other water)	Total Delivered to be Stored
Total Acre-feet Delivered to be Stored by Water Type										

Part II -- Water Delivered to Recharge / Storage Facilities by the Provider

	Measurement Method	Water Storage Permit Number (73-xxxxxx.xxxx)	Acre-feet Delivered to be Stored by Water Type						
			Salt/Verde	Plan 6	CAP	Effluent	Other	(Describe Other water)	Total Delivered to be Stored
	Metered	73-500427.0000				522.68			522.68
Total Acre-feet Delivered to be Stored by Water Type									

Sch. E Part B Total acre-feet of Water Delivered to be Stored:	522.68
Sch. E. Part A Total Acre-feet of Water Received or Diverted from Other Sources (Part I + Part II + Part III)	108.34
Sum of Schedule E Part A (Part I + Part II + Part III) minus sum of Schedule E Part B (Part I + Part II)	591.02

ARIZONA DEPARTMENT OF WATER RESOURCES

SCHEDULE F-1 PART 1

POPULATION

ANNUAL REPORT 2014

PROVIDER NAME

[1] PIMA UTILITIES COMPANY

RIGHT/PERMIT NO.

56-002031.0000

Pursuant to the Third Management Plan, municipal water providers are required to supply the following information. This information is used to determine actual and target GPCD numbers for Large Municipal Providers and for planning information for Small Municipal Providers.

DEFINITION OF A HOUSING UNIT

A housing unit means a group of rooms or a single room occupied as separate living quarters. Examples of a housing unit include a single-family home, a townhouse, a condominium, an apartment, a permanently setup mobile home or a unit in a multi-family complex. A housing unit may be occupied by a family, a family and unrelated persons living together, two or more unrelated persons living together, or by one person. The number of housing units is ***not*** the number of service connections. Mobile homes in an overnight or limited-stay mobile home park or a unit in a campground, motel, hotel, or other temporary lodging facility are not considered housing units.

SINGLE-FAMILY HOUSING

A single-family housing unit is a detached dwelling. Include mobile homes ***not*** located in a mobile home park.

Single-Family Housing	**Housing Units**
Single-family housing units *(not service connections)* as of July 1, 2013.	[2] 9960
Indicate the net change (added and deleted) of single-family housing units *(not service connections)* in your service area between July 1, 2013 and July 1, 2014.	[3] -0
Total single-family housing units *(not service connections)* as of July 1, 2014.	[4] 9960

MULTI-FAMILY HOUSING

A multi-family housing unit is a mobile home in a mobile home park or any permanent housing unit having one or more common walls with another housing unit located in a multi-family residential structure, including a unit in a duplex, triplex, four-plex, condominium development, townhouse development or apartment complex. Include mobile homes if they are located in a mobile home park. Do not include mobile homes that are located in an overnight or limited stay mobile home park.

Multi-Family Housing	**Housing Units**
Multi-family housing units *(not service connections)* as of July 1, 2013.	[5] 400
Indicate the net change (added and deleted) of multi-family housing units *(not service connections)* in your service area between July 1, 2013 and July 1, 2014.	[6] -0
Total multi-family housing units *(not service connections)* as of July 1, 2014.	[7] 400

Please contact the AMA Office if you need assistance completing this form.

(602) 771-8585

ARIZONA DEPARTMENT OF WATER RESOURCES

SCHEDULE F-1 PART 2

MUNICIPAL PROVIDER WATER DELIVERIES

ANNUAL REPORT 2014

[1]

PROVIDER NAME

PIMA UTILITIES COMPANY

RIGHT/PERMIT NO.

56-002031.0000

Total Production 599813

Pursuant to the Third Management Plan (TMP) and the Groundwater Code, large water providers are required to supply the following information. Do not include direct use effluent on this schedule (please use Part 3 of Schedule F-1).

MONTH	DELIVERIES IN ACRE-FEET									
	RESIDENTIAL [A]		NON-RESIDENTIAL [B]							TOTAL
	Single Family	Multi Family	Industrial	Commercial	Govt	Turf Related Facilities*	Other Turf**	Construction	Other***	
Jan	180.07	3.42	5.95	28.83		77.62	1.77	.07	.02	302.75
Feb	183.41	2.81	6.64	31.52		83.05	2.11	.38	.02	309.94
Mar	194.11	3.01	6.38	31.31		109.58	2.38	.22	.02	345.01
Apr	214.41	3.21	5.57	42.79		224.97	2.59	.19	3.65	507.38
May	221.05	3.42	6.38	60.83		345.81	3.29	1.07	6.13	657.06
Jun	224.67	3.16	5.62	79.44		379.73	7.85	.51	2.94	701.92
Jul	238.20	3.05	4.69	79.00		266.92	5.69	.16	5.92	603.19
Aug	219.20	3.04	7.19	57.92		253.83	4.02	.01	5.86	548.06
Sep	211.63	2.83	4.05	39.99		156.65	3.58	0	.02	418.76
Oct	201.26	3.04	5.26	69.27		204.99	3.08	.29	.02	483.20
Nov	203.28	3.01	5.34	45.48		160.00	2.66	.84	.02	419.64
Dec	179.14	3.20	5.81	27.21		35.87	2.24	.08	.02	253.58
Total Deliveries	[2] 2410850	[3] 37.20	[4] 68.87	[5] 60818	[6]	[7] 2299.61	[8] 41.20	[9] 3.83	[10] 24.64	[11] 5952.09
Total Active Connections	[12] 9900	[13] 2	[14] 1	[15] 22	[16]	[17] 4	[18] 2	[19] n/a	[20] n/a	[21] 0191

* Turf Related Facilities includes turf-related facilities (10 or more acres of turf or other high water use landscaping) and landscaped public rights-of-way identified as Individual Users.

** Other Turf includes water delivered to other turf areas that are less than 10 acres.

*** Other includes unmetered deliveries. Unmetered deliveries must be calculated using a generally accepted method of estimating water use. Explain in a separate letter how any unmetered deliveries were calculated and to which category it would belong if it were metered. e.g. Industrial, Commercial, etc.

FIRE DEPT ESTIMATES PROVIDED BY FIRE CHIEF - FIRE HYDRANT USE IS FOR MAIN LINE FLUSHING.

Please contact the AMA Office if you need assistance completing this form.

(602) 771-8585

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SCHEDULE F-1 PART 3

MUNICIPAL PROVIDER DIRECT USE EFFLUENT

ANNUAL REPORT 2014

ARIZONA DEPARTMENT OF WATER RESOURCES

PROVIDER NAME

PIMA UTILITIES COMPANY

RIGHT/PERMIT NO.

56-002031.0000

AMENDED

Pursuant to the Third Management Plan, municipal water providers are required to supply the following information. Report the amount of effluent produced, received, delivered, reused, recharged or discharged in your service area in calendar year 2014. Please attach a list of all the plants at which wastewater generated by uses of water within your service area is treated. List the volume of effluent produced at each plant from uses of water within your service area during calendar year 2014.

Please include all effluent produced in your service area, even if it is sent to a regional or other wastewater treatment facility not owned or operated by you.

PART 1 - TOTAL AVAILABLE EFFLUENT

A. Effluent Produced from Uses of Water within your Service Area:

1.	Effluent produced within service area (include wastewater processed at all treatment plants/entities)	1174.13	af
2.	Effluent used as process water at treatment plants	0	af
3.	PartA.1 - Part A.2 (total effluent produced within service area during CY 2014)	1174.13	af

B. Additional Effluent Sources:

1.	Effluent received from other water right holders	0	af
2.	Effluent recovered as long-term storage credits pursuant to a Recovery Well (74) Permit (sum of recovered from all 74s)	0	af
3.	Part B.1 + Part B.2 (total effluent used during CY 2014 that was not produced within the service area during CY 2014)	0	af

C. Total Available Effluent:

1.	Total from Part 1.A.3 above + Total from Part 1.B.3 above:	1174.13	af

PART 2 - TOTAL EFFLUENT USE

A. Effluent Delivered/Used within your Service Area:

1.	Effluent delivered/used within your service area for landscape watering	719.79	af
2.	Effluent delivered/used within service area for other purposes (please attach additional sheets and list and describe each use separately	0	af
3.	Part 2.A.1 + Part 2.A.2 (total effluent use within your service area during 2014)	719.79	af

B. Effluent Delivered to Other Rights/Permits (as shown on your Schedule D form):

1.	Total Effluent delivered to other water rights/permits	0	af

C. Total Available Effluent:

1.	Effluent delivered to recharge projects as reported on Water Storage Reports (73s)	522.68	af
2.	Effluent delivered/used (from Part 2.A) that is recovered annual storage credits:	108.34	af
3.	Part 2.C.1 – Part 2.C.2 (total effluent used for storage projects before evaporation or cuts to the aquifer)	414.34	af

D. Effluent Delivered to Entities Other than Rights/Permits/Water Storage Uses:

1.	Effluent delivered for additional uses not associated with a right/permit/water storage use	0	af

Please explain:

PART 3 – TOTAL EFFLUENT DISCHARGED

A. Effluent Discharged:

1.	Total effluent discharged (not recharged, delivered, or used)	0	af

Please contact the AMA Office if you need assistance completing this form.

(602) 771-8585

ARIZONA DEPARTMENT OF WATER RESOURCES

SCHEDULE F-1 PART 3

MUNICIPAL PROVIDER DIRECT USE EFFLUENT

ANNUAL REPORT 2014

PROVIDER NAME

PIMA UTILITIES COMPANY

RIGHT/PERMIT NO.

56-002031.0000

Pursuant to the Third Management Plan, municipal water providers are required to supply the following information. Report the amount of effluent produced, received, delivered, reused, recharged or discharged in your service area in calendar year 2014. Please attach a list of all the plants at which wastewater generated by uses of water within your service area is treated. List the volume of effluent produced at each plant from uses of water within your service area during calendar year 2014.

Please include all effluent produced in your service area, even if it is sent to a regional or other wastewater treatment facility not owned or operated by you.

PART 1 - TOTAL AVAILABLE EFFLUENT

A. Effluent Produced from Uses of Water within your Service Area:

1.	Effluent produced within service area (include wastewater processed at all treatment plants/entities)	1174.13	af
2.	Effluent used as process water at treatment plants	0	af
3.	PartA.1 - Part A.2 (total effluent produced within service area during CY 2014)	1174.13	af

B. Additional Effluent Sources:

1.	Effluent received from other water right holders	0	af
2.	Effluent recovered as long-term storage credits pursuant to a Recovery Well (74) Permit (sum of recovered from all 74s)	68.34	af
3.	Part B.1 + Part B.2 (total effluent used during CY 2014 that was not produced within the service area during CY 2014)	68.34	af

C. Total Available Effluent:

1.	Total from Part 1.A.3 above + Total from Part 1.B.3 above:	1242.47	af

PART 2 – TOTAL EFFLUENT USE

A. Effluent Delivered/Used within your Service Area:

1.	Effluent delivered/used within your service area for landscape watering	651.45	af
2.	Effluent delivered/used within service area for other purposes (please attach additional sheets and list and describe each use separately	0	af
3.	Part 2.A.1 + Part 2.A.2 (total effluent use within your service area during 2014)	651.45	af

B. Effluent Delivered to Other Rights/Permits (as shown on your Schedule D form):

1.	Total Effluent delivered to other water rights/permits	0	af

C. Total Available Effluent:

1.	Effluent delivered to recharge projects as reported on Water Storage Reports (73s)	522.68	af
2.	Effluent delivered/used (from Part 2.A) that is recovered annual storage credits:	0	af
3.	Part 2.C.1 – Part 2.C.2 (total effluent used for storage projects before evaporation or cuts to the aquifer)	522.68	af

D. Effluent Delivered to Entities Other than Rights/Permits/Water Storage Uses:

1.	Effluent delivered for additional uses not associated with a right/permit/water storage use	0	af

Please explain:

PART 3 – TOTAL EFFLUENT DISCHARGED

A. Effluent Discharged:

1.	Total effluent discharged (not recharged, delivered, or used)	0	af

Please contact the AMA Office if you need assistance completing this form.

(602) 771-8585

SCHEDULE G-2

TURF-RELATED FACILITIES

ANNUAL REPORT 2014

ARIZONA DEPARTMENT OF WATER RESOURCES

Facility Name: SUN LAKE HOA #1 (W/SUN LAKES C

Facility No.: 25-225292.0000

Facility Owner :

Contact Name: SORIANO, STEVE

Contact Address: 9532 E RIGGS RD

SUN LAKES,AZ 85248

Contact Phone: 480-895-4251

Rights Used at Facility:

56-002031.0000 58-101578.0009

If you received an annual use letter from an irrigation district or municipal provider, please submit a copy of their letter with your 2014 Annual Water Withdrawal and Use Report to validate deliveries received.

Pursuant to Chapter 6 of the Third Management Plan of your Active Management Area, all turf-related facilities are required to supply the following information. Please complete one form per turf-related facility. Instructions are listed on the reverse side of this form.

PART 1 - TURF RELATED WATER USE

Source		Entity or Water Right Number(s) Supplying Water	Amount (acre-feet)
Groundwater (including in-lieu groundwater)		56-002031.0000	612.48
Effluent	• Municipal Reclaimed		
	• Other		
Surface Water	• Decreed/Appropriative		
	• Normal Flow		
	• Spillwater		
	• CAP		
Municipal (commingled/potable)			
Recovered water (specify type of water)			
Other (specify)			
		SUB-TOTAL OF TURF-RELATED WATER USE	612.48
NON Turf-related water additional sheets may be used	Meter Readings:	Beginning: End: Subtract	< >
	Purpose:		
		TOTAL TURF-RELATED WATER USE	612.48

PART 2 - LANDSCAPED AND WATER SURFACE AREAS CHANGES

Total turf acreage overseeded 38acres

Has there been any landscape or water surface acreage changes at your facility? YES ☐ NO ☐

6-310 Monitoring and Reporting Requirements for Turf-Related Facilities:

An industrial user who uses water at a turf-related facility that commences watering to any new turfed acres, low water use landscaped area or water surface acres after January 1, 2014 shall submit to the director documentation of the new acres no later than 90 days after commencement of providing water to the new acres or receiving notice of these conservation requirements, whichever is later. The scale of the submitted documents, extent of turf acres, water surface acres, and low water use landscaped area must clearly be shown.

SCHEDULE G-2
TURF-RELATED FACILITIES
ANNUAL REPORT 2014

ARIZONA DEPARTMENT OF WATER RESOURCES

Facility Name: SUN LAKES OAKWOOD GC

Facility No.: 25-225320.0000

Facility Owner : SUN LAKES MARKETING LP
Contact Name: SORIANO, STEVE
Contact Address: 9532 E RIGGS RD
SUN LAKES,AZ 85248
Contact Phone: 480-895-4251

Rights Used at Facility:

56-002031.0000	58-130460.0000

RECEIVED AUG 5 2015 ADWR

If you received an annual use letter from an irrigation district or municipal provider, please submit a copy of their letter with your 2014 Annual Water Withdrawal and Use Report to validate deliveries received.

Pursuant to Chapter 6 of the Third Management Plan of your Active Management Area, all turf-related facilities are required to supply the following information. Please complete one form per turf-related facility. Instructions are listed on the reverse side of this form.

AMENDED

PART 1 - TURF RELATED WATER USE

Source		Entity or Water Right Number(s) Supplying Water	Amount (acre-feet)
Groundwater (including in-lieu groundwater)		56-002031.0000	410.86
		74-547795.0000	33.44
Effluent	• Municipal Reclaimed		651.44
	• Other		
Surface Water	• Decreed/Appropriative		
	• Normal Flow		
	• Spillwater		
	• CAP		
Municipal (commingled/potable)			
Recovered water (specify type of water)			
Other (specify)			
		SUB-TOTAL OF TURF-RELATED WATER USE	1095.74
NON Turf-related water additional sheets may be used	Meter Readings:	Beginning: End: Subtract	< >
	Purpose:		
		TOTAL TURF-RELATED WATER USE	1091.81

PART 2 - LANDSCAPED AND WATER SURFACE AREAS CHANGES

Total turf acreage overseeded _____

Has there been any landscape or water surface acreage changes at your facility? YES ☐ NO ☐

6-310 Monitoring and Reporting Requirements for Turf-Related Facilities:

An industrial user who uses water at a turf-related facility that commences watering to any new turfed acres, low water use landscaped area or water surface acres after January 1, 2014 shall submit to the director documentation of the new acres no later than 90 days after commencement of providing water to the new acres or receiving notice of these conservation requirements, whichever is later. The scale of the submitted documents, extent of turf acres, water surface acres, and low water use landscaped area must clearly be shown.

SCHEDULE G-2

TURF-RELATED FACILITIES

ANNUAL REPORT 2014

ARIZONA DEPARTMENT OF WATER RESOURCES

Facility Name: SUN LAKES HOA #2

Facility No.: 24-224128.0000

Facility Owner :

Contact Name: SORIANO, STEVE

Contact Address: 9532 E RIGGS RD

SUN LAKES,AZ 85248

Contact Phone: 480-895-4251

Rights Used at Facility:

56-002031.0000

If you received an annual use letter from an irrigation district or municipal provider, please submit a copy of their letter with your 2014 Annual Water Withdrawal and Use Report to validate deliveries received.

Pursuant to Chapter 6 of the Third Management Plan of your Active Management Area, all turf-related facilities are required to supply the following information. Please complete one form per turf-related facility. Instructions are listed on the reverse side of this form.

PART 1 - TURF RELATED WATER USE

Source		Entity or Water Right Number(s) Supplying Water	Amount (acre-feet)
Groundwater (including in-lieu groundwater)		56-002031.0000	1160.51
Effluent	• Municipal Reclaimed		
	• Other		
Surface Water	• Decreed/Appropriative		
	• Normal Flow		
	• Spillwater		
	• CAP		
Municipal (commingled/potable)			
Recovered water (specify type of water)			
Other (specify)			
		SUB-TOTAL OF TURF-RELATED WATER USE	1160.51
NON Turf-related water additional sheets may be used	Meter Readings:	Beginning: End: Subtract	< >
	Purpose:		
		TOTAL TURF-RELATED WATER USE	1160.51

PART 2 - LANDSCAPED AND WATER SURFACE AREAS CHANGES

Total turf acreage overseeded 160acres

Has there been any landscape or water surface acreage changes at your facility? YES ☐ NO ☐

6-310 Monitoring and Reporting Requirements for Turf-Related Facilities:

An industrial user who uses water at a turf-related facility that commences watering to any new turfed acres, low water use landscaped area or water surface acres after January 1, 2014 shall submit to the director documentation of the new acres no later than 90 days after commencement of providing water to the new acres or receiving notice of these conservation requirements, whichever is later. The scale of the submitted documents, extent of turf acres, water surface acres, and low water use landscaped area must clearly be shown.

SCHEDULE G-2

TURF-RELATED FACILITIES

ANNUAL REPORT 2014

ARIZONA DEPARTMENT OF WATER RESOURCES

Facility Name: SUN LAKES OAKWOOD GC

Facility No.: 25-225320.0000

Facility Owner : SUN LAKES MARKETING LP

Contact Name: SORIANO, STEVE

Contact Address: 9532 E RIGGS RD

SUN LAKES,AZ 85248

Contact Phone: 480-895-4251

Rights Used at Facility:

56-002031.0000 58-130460.0007

If you received an annual use letter from an irrigation district or municipal provider, please submit a copy of their letter with your 2014 Annual Water Withdrawal and Use Report to validate deliveries received.

Pursuant to Chapter 6 of the Third Management Plan of your Active Management Area, all turf-related facilities are required to supply the following information. Please complete one form per turf-related facility. Instructions are listed on the reverse side of this form.

PART 1 - TURF RELATED WATER USE

Source		Entity or Water Right Number(s) Supplying Water	Amount (acre-feet)
Groundwater (including in-lieu groundwater)		56-002031.0000	410.86
		72-547295.0000	33.44
Effluent	• Municipal Reclaimed		647.51
	• Other		
Surface Water	• Decreed/Appropriative		
	• Normal Flow		
	• Spillwater		
	• CAP		
Municipal (commingled/potable)			
Recovered water (specify type of water)			
Other (specify)			
		SUB-TOTAL OF TURF-RELATED WATER USE	1091.81
NON Turf-related water additional sheets may be used	Meter Readings:	Beginning: End: Subtract	< >
	Purpose:		
		TOTAL TURF-RELATED WATER USE	1091.81

PART 2 - LANDSCAPED AND WATER SURFACE AREAS CHANGES

Total turf acreage overseeded _____

Has there been any landscape or water surface acreage changes at your facility? YES ☐ NO ☐

6-310 Monitoring and Reporting Requirements for Turf-Related Facilities:

An industrial user who uses water at a turf-related facility that commences watering to any new turfed acres, low water use landscaped area or water surface acres after January 1, 2014 shall submit to the director documentation of the new acres no later than 90 days after commencement of providing water to the new acres or receiving notice of these conservation requirements, whichever is later. The scale of the submitted documents, extent of turf acres, water surface acres, and low water use landscaped area must clearly be shown.

SCHEDULE G-2

TURF-RELATED FACILITIES

ANNUAL REPORT 2014

ARIZONA DEPARTMENT OF WATER RESOURCES

Facility Name: SUN LAKES HOA #3

Facility No.: 24-224132.0000

Facility Owner :

Contact Name: SORIANO, STEVE

Contact Address: 9532 E RIGGS RD

SUN LAKES,AZ 85248

Contact Phone: 480-895-4251

Rights Used at Facility:

56-002031.0000 58-110067.0002

If you received an annual use letter from an irrigation district or municipal provider, please submit a copy of their letter with your 2014 Annual Water Withdrawal and Use Report to validate deliveries received.

Pursuant to Chapter 6 of the Third Management Plan of your Active Management Area, all turf-related facilities are required to supply the following information. Please complete one form per turf-related facility. Instructions are listed on the reverse side of this form.

PART 1 - TURF RELATED WATER USE

Source		Entity or Water Right Number(s) Supplying Water	Amount (acre-feet)
Groundwater (including in-lieu groundwater)		56-002031.0000	82.33
Effluent	• Municipal Reclaimed		
	• Other		
Surface Water	• Decreed/Appropriative		
	• Normal Flow		
	• Spillwater		
	• CAP		
Municipal (commingled/potable)			
Recovered water (specify type of water)		71-547149.0000 REC → LANDSCAPE	34.90
Other (specify) RALLFIELD			6.36
		SUB-TOTAL OF TURF-RELATED WATER USE	123.59
NON Turf-related water additional sheets may be used	**Meter Readings:**	**Beginning:** **End:** **Subtract**	< >
	Purpose:		
		TOTAL TURF-RELATED WATER USE	123.59

PART 2 - LANDSCAPED AND WATER SURFACE AREAS CHANGES

Total turf acreage overseeded 8 ACRES

Has there been any landscape or water surface acreage changes at your facility? YES ☐ NO ☐

6-310 Monitoring and Reporting Requirements for Turf-Related Facilities:

An industrial user who uses water at a turf-related facility that commences watering to any new turfed acres, low water use landscaped area or water surface acres after January 1, 2014 shall submit to the director documentation of the new acres no later than 90 days after commencement of providing water to the new acres or receiving notice of these conservation requirements, whichever is later. The scale of the submitted documents, extent of turf acres, water surface acres, and low water use landscaped area must clearly be shown.

SCHEDULE S

SERVICE AREA MAP UPDATE

ANNUAL REPORT 2014

ARIZONA DEPARTMENT OF WATER RESOURCES

PROVIDER NAME

PIMA UTILITIES COMPANY

RIGHT/PERMIT NO.

56-002031.0000

Pursuant to A.R.S. §45-498 each city, town, private water company and irrigation district in an active management area shall maintain a current map clearly delineating its service area and distribution system in the director's office and shall furnish such other related data as the director may require

2014 ANNUAL SERVICE AREA AND OPERATING DISTRIBUTION SYSTEM UPDATES RESPONSE FORM

Please complete and return THIS FORM along with your UPDATED DISTRIBUTION SYSTEM (WATER LINE) MAP and WATER SERVICE AREA BOUNDARY MAP to ADWR by MARCH 31, 2015 along with your 2014 ANNUAL WATER WITHDRAWAL & USE REPORT.

Service Area Map Contact Information:

If the contact person in your office for service area map updates has changed in the last year, please email ADWR with the updated contact person information. Please send that information to data_management@azwater.gov.

Please check the appropriate boxes:

OPERATING DISTRIBUTION SYSTEM MAP

Your ***operating distribution system*** includes your water lines, wells, storage tanks, water treatment facilities and related infrastructure used to treat and distribute water to your customers. If you have added any new water lines, wells, treatment or storage facilities over the last calendar year, please submit an updated map.

Were there changes to the operating distribution system within the last year? ( ) Yes (✓) No

WATER SERVICE AREA BOUNDARY MAP

Your ***service area boundary*** is an area delineated as a 100 foot buffer around the exterior of your water lines, excluding any small municipal providers, other large municipal providers, or areas that you do not serve (exempt domestic well areas) within the exterior boundary of your water lines.

Were there changes to the area in service within the last year ? ( ) Yes (✓) No

If there were changes to either your operating distribution system or your water service area boundary, please submit an updated map(s) in one of the following formats:

- Digital ArcGIS Shapefile
- Digital ArcGIS geodatabase file
- Digital AutoCAD file
- .pdf File
- Hardcopy (If no electronic form exists)

SUBMIT ALL MAP REVISIONS BY MARCH 31, 2015. If you would like to submit your map by uploading to ADWR's ftp or Infoshare websites, please call the Active Management Area at (602) 771-8585 or email us for instructions at data_management@azwater.gov.

Steve Soriano	Gen Mgr	480 895 6009
Name-Printed	Title	Phone
[signature]	3/13/15	
Signature	Date	Email

Please contact the AMA Office if you need assistance completing this form.

(602) 771-8585

WORKSHEET W-1 2014

GROUNDWATER RIGHT/PERMIT/ BMP Farm Unit NO. 56-002031.0000

[1] DWR WELL REGISTRATION NO	10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
55-211808 R/23	NW	NW	SW	30	2.0S	5.0E

[2] TYPE OF MEASURING DEVICE	MAKE / MODEL
TOTALIZER	Water Specialties
SIZE: 6"	UNITS MEASURED: Gal
INSTALLATION OR OVERHAUL DATE: 1/1/08	

[3] POWER CO. NAME	ACCOUNT NO	POWER METER NO.
OCOTILLO	na	Na

Power comes from WWTP

ENERGY CONSUMPTION	UNITS
	KWH

[4] DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☐

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
[5] INITIAL	[6] ENDING	[7] DIFFERENCE
9131000	13941000	4810000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE

[8] ACRE FEET	[9] BREAKDOWN ESTIMATE
14.76	

Enter total Acre-feet Shown in [10] in one of Columns 4-8 of Schedule A

[10] TOTAL IN ACRE-FEET: 14.76

---

[1] DWR WELL REGISTRATION NO	10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
55-514527 #34	SE	SE	SE	32	2.0S	5.0E

[2] TYPE OF MEASURING DEVICE	MAKE / MODEL
TOTALIZER	Water Specialties
SIZE: 8"	UNITS MEASURED: GALLONS
INSTALLATION OR OVERHAUL DATE: 8/12/08	

[3] POWER CO. NAME	ACCOUNT NO	POWER METER NO
SALT RIVER PROJECT	75-29-00531-1	~~373977~~ 2373228

ENERGY CONSUMPTION	UNITS
809888	KWH

[4] DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☒ No ☐

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
[5] INITIAL	[6] ENDING	[7] DIFFERENCE
2488432000	2834052000	345620000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE

[8] ACRE FEET	[9] BREAKDOWN ESTIMATE
1060.67	

Enter total Acre-feet Shown in [10] in one of Columns 4-8 of Schedule A

[10] TOTAL IN ACRE-FEET: 1060.67

---

[1] DWR WELL REGISTRATION NO	10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
55-520891 #27	NW	NW	SW	28	2.0S	5.0E

[2] TYPE OF MEASURING DEVICE	MAKE / MODEL
TOTALIZER	Water Specialties
SIZE: 8" - 10"	UNITS MEASURED: GALLONS
INSTALLATION OR OVERHAUL DATE: #1-4/06 #2 8/05 #3 11/12	

[3] POWER CO. NAME	ACCOUNT NO.	POWER METER NO.
SALT RIVER PROJECT	7536071891	346123

ENERGY CONSUMPTION	UNITS
683385	KWH

[4] DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☒

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
[5] INITIAL	[6] ENDING	[7] DIFFERENCE
#1 487645000	527140000	39495000
#3 914649000	960777000	46128000
#2 307182000	334008000	26826000

= 112449000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE

[8] ACRE FEET	[9] BREAKDOWN ESTIMATE
345.09	

Enter total Acre-feet Shown in [10] in one of Columns 4-8 of Schedule A

[10] TOTAL IN ACRE-FEET: 345.09

---

[1] DWR WELL REGISTRATION NO	10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
55-554079 R/21	SW	NE	SW	30	2.0S	5.0E

[2] TYPE OF MEASURING DEVICE	MAKE / MODEL
TOTALIZER	Water Specialties
SIZE: 4"	UNITS MEASURED: GAL
INSTALLATION OR OVERHAUL DATE: 9/19/13	

[3] POWER CO. NAME	ACCOUNT NO.	POWER METER NO.
SALT RIVER PROJECT	7536057881	326676

POWER COMES FROM OAKWOOD GOLF COURSE

ENERGY CONSUMPTION	UNITS
X	X

[4] DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☐

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
[5] INITIAL	[6] ENDING	[7] DIFFERENCE
1126000	7688000	6562000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE

[8] ACRE FEET	[9] BREAKDOWN ESTIMATE
20.14	

Enter total Acre-feet Shown in [10] in one of Columns 4-8 of Schedule A

[10] TOTAL IN ACRE-FEET: 20.14

WORKSHEET W-1 2014

GROUNDWATER RIGHT/PERMIT/ BMP Farm Unit NO. 56-002031.0000

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1 DWR WELL REGISTRATION NO. 55-561906 R/24

10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
SW	NE	SE	29	2.0S	5.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER — MAKE / MODEL: Water Specialties — SIZE: 6" — UNITS MEASURED: GAL — INSTALLATION OR OVERHAUL DATE: 10/14

3 POWER CO NAME: SALT RIVER PROJECT — ACCOUNT NO. 7536335271 — POWER METER NO. 361674

ENERGY CONSUMPTION: 7282 — UNITS: KWH

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☐

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS

5 INITIAL	6 ENDING	7 DIFFERENCE
88581000	90795000	2214000
0	687000	687000

=2901000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE

8 ACRE FEET: 8.90 — **9** BREAKDOWN ESTIMATE:

Enter total Acre-feet Shown in **10** in one of Columns 4-8 of Schedule A — **10** TOTAL IN ACRE-FEET: 8.90

---

1 DWR WELL REGISTRATION NO. 55-561907 R/22

10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
NW	SE	NW	29	2.0S	5.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER — MAKE / MODEL: Water Specialties — SIZE: 6" — UNITS MEASURED: Gal — INSTALLATION OR OVERHAUL DATE:

3 POWER CO NAME: SALT RIVER PROJECT — ACCOUNT NO. 7536298511 — POWER METER NO. ~~375896~~ 1321595

ENERGY CONSUMPTION: 36307 — UNITS: KWH

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☐

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS

5 INITIAL	6 ENDING	7 DIFFERENCE
54149000	57065000	2916000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE

8 ACRE FEET: 8.95 — **9** BREAKDOWN ESTIMATE:

Enter total Acre-feet Shown in **10** in one of Columns 4-8 of Schedule A — **10** TOTAL IN ACRE-FEET: 8.95

---

1 DWR WELL REGISTRATION NO. 55-566383 R/25

10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
NE	NE	SE	29	2.0S	5.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER — MAKE / MODEL: Water Specialties — SIZE: 6" — UNITS MEASURED: GAL — INSTALLATION OR OVERHAUL DATE: 1/2013

3 POWER CO NAME: SALT RIVER PROJECT — ACCOUNT NO. 7536360351 — POWER METER NO. 352461

ENERGY CONSUMPTION: 8398 — UNITS: KWH

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☐

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS

5 INITIAL	6 ENDING	7 DIFFERENCE
7326000	12405000	5079000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE

8 ACRE FEET: 15.59 — **9** BREAKDOWN ESTIMATE:

Enter total Acre-feet Shown in **10** in one of Columns 4-8 of Schedule A — **10** TOTAL IN ACRE-FEET: 15.59

---

1 DWR WELL REGISTRATION NO. 55-566937 #19B

10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
NW	NW	NE	29	2.0S	5.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER — MAKE / MODEL: Water Specialties — SIZE: 10" — UNITS MEASURED: GAL — INSTALLATION OR OVERHAUL DATE: 10/09

3 POWER CO NAME: SALT RIVER PROJECT — ACCOUNT NO. 75-36-39845-1 — POWER METER NO. ~~351366~~ 1371128

ENERGY CONSUMPTION: 342699 — UNITS: KWH

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☐

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS

5 INITIAL	6 ENDING	7 DIFFERENCE
2472500000	2734568000	262068000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET: 804.26 — **9** BREAKDOWN ESTIMATE:

Enter total Acre-feet Shown in **10** in one of Columns 4-8 of Schedule A — **10** TOTAL IN ACRE-FEET: 804.26

WORKSHEET W-1 2014

GROUNDWATER RIGHT/PERMIT/ BMP Farm Unit NO. 56-002031.0000

1 DWR WELL REGISTRATION NO	10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
55-625796 #29	NE	NE	NE	29	2.0S	5.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER	MAKE / MODEL: Water Specialties
SIZE: 10"	UNITS MEASURED: GAL
INSTALLATION OR OVERHAUL DATE: 5/10	

3 POWER CO. NAME	ACCOUNT NO.	POWER METER NO
SALT RIVER PROJECT	75-36-12247-1	344402

ENERGY CONSUMPTION	UNITS
1214480	KWH

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☒
ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE
750620000	842960000	92340000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET	283.40	9 BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	283.40

---

1 DWR WELL REGISTRATION NO	10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
55-625797 —	SE	NE	SE	20	2.0S	5.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER	MAKE / MODEL:
SIZE:	UNITS MEASURED:
INSTALLATION OR OVERHAUL DATE:	

3 POWER CO. NAME	ACCOUNT NO.	POWER METER NO
SALT RIVER PROJECT	701-00008-1	320372

ENERGY CONSUMPTION	UNITS

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☒
ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET		9 BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	

---

1 DWR WELL REGISTRATION NO	10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
55-625798 #31	SE	SE	SE	31	2.0S	5.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER	MAKE / MODEL: McCrometer
SIZE: 10"	UNITS MEASURED: GALLONS
INSTALLATION OR OVERHAUL DATE: 4/10	

3 POWER CO. NAME	ACCOUNT NO.	POWER METER NO
SALT RIVER PROJECT	75-16-00001-1	349023 2307224

ENERGY CONSUMPTION	UNITS
1081282	KWH

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☒ No ☐
ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE
920861000	1159905000	239044000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET	733.60	9 BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	733.60

---

1 DWR WELL REGISTRATION NO.	10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
55-625799 #32	SE	NE	NE	32	2.0S	5.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER	MAKE / MODEL: Water Specialties
SIZE: 10"	UNITS MEASURED: GALLONS
INSTALLATION OR OVERHAUL DATE: 4/11	

3 POWER CO. NAME	ACCOUNT NO.	POWER METER NO.
SALT RIVER PROJECT	75-22-00243-1	375226 2571094

ENERGY CONSUMPTION	UNITS
384048	KWH

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☒ No ☐
ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE
1030066000	1349187000	319121000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET	979.35	9 BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	979.35

WORKSHEET W-1 2014

GROUNDWATER RIGHT/PERMIT/ BMP Farm Unit NO. 56-002031.0000

1 DWR WELL REGISTRATION NO. 55-625800 #33

10 Q	40 Q	160 Q	Sec	Twn	Rng
SE	SE	SW	32	2.0S	5.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER
MAKE / MODEL: Water Specialties
SIZE: 8" & 10"
UNITS MEASURED: GALLONS
INSTALLATION OR OVERHAUL DATE: #1-8/11 #2-7/09 #3-8/11

3 POWER CO. NAME: SALT RIVER PROJECT
ACCOUNT NO.: 75-28-00420-1
POWER METER NO.: 38462 7571089
ENERGY CONSUMPTION: 408835 UNITS: KWH

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP? Yes ☐ No ☒
ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE
#1 435607000	600038000	164431000
#2 156264000	207890000	46616000
#3 33495000	109258000	59031000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE = 270078000

8 ACRE FEET	847.25	9 BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	847.25

---

1 DWR WELL REGISTRATION NO. 55-806730 #19A

10 Q	40 Q	160 Q	Sec	Twn	Rng
NE	NE	NE	30	2.0S	5.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER
MAKE / MODEL: Water Specialties
SIZE: 10"
UNITS MEASURED: GALLONS
INSTALLATION OR OVERHAUL DATE: 3/12

3 POWER CO. NAME: SALT RIVER PROJECT
ACCOUNT NO.: 75-36-23127-1
POWER METER NO.: 3461232371118
ENERGY CONSUMPTION: 778092 UNITS: KWH

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP? Yes ☒ No ☐
ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE
1336113000	1616400000	280289000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE

8 ACRE FEET	860.17	9 BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	860.17

---

1 DWR WELL REGISTRATION NO.

10 Q	40 Q	160 Q	Sec	Twn	Rng

2 TYPE OF MEASURING DEVICE
MAKE / MODEL
SIZE
UNITS MEASURED
INSTALLATION OR OVERHAUL DATE

3 POWER CO. NAME
ACCOUNT NO.
POWER METER NO.
ENERGY CONSUMPTION UNITS

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP? Yes ☐ No ☐
ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE

8 ACRE FEET		9 BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	

---

1 DWR WELL REGISTRATION NO.

10 Q	40 Q	160 Q	Sec	Twn	Rng

2 TYPE OF MEASURING DEVICE
MAKE / MODEL
SIZE
UNITS MEASURED
INSTALLATION OR OVERHAUL DATE

3 POWER CO. NAME
ACCOUNT NO
POWER METER NO
ENERGY CONSUMPTION UNITS

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP? Yes ☐ No ☐
ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET		9 BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	

SCHEDULE CER 2014

ARIZONA DEPARTMENT OF WATER RESOURCES

CONSERVATION EFFORTS REPORT

MODIFIED NON-PER CAPITA CONSERVATION PROGRAM

ANNUAL REPORT 2014

PIMA UTILITY

56-002031.0000

SERVICE AREA INFORMATION

Total residential and non-residential connections reported on your most recent Provider Profile:	10,188	☐Tier 1 (1 – 5000) **X**Tier 2 (5001 – 30,000) ☐Tier 3 (more than 30,000)
Total residential and non-residential connections as of December 31, 2014: *(See Schedule F1, Part 2, Box 21)*	10,173	☐Tier 1 (1 – 5000) **X**Tier 2 (5001 – 30,000) ☐Tier 3 (more than 30,000)
Did your system transition to a higher tier during this reporting year? If yes, has a new Provider Profile been submitted?	Yes☐ Yes☐	No **X** No ☐ If no, please attach
Have you submitted a copy of your current rate structure to ADWR?	Yes**X**	No ☐ If no, please attach.

PUBLIC EDUCATION PROGRAM

You may attach additional pages, information, or materials.

1. Communication to Customers: Describe how you communicated to customers (at least twice per year) about the importance of conservation and the availability of water conservation information. Please include the following information:

Water wise tips have been placed on the monthly bills. They include tips about low water use vegetation and checking for leaks in the system. This communication reaches all customers that receive their bills.

2. Written Materials: Describe the free written conservation information you have available for customers and the locations where available. Please include the following information:.

Water saving brochures that were purchased from AWWA are available throughout the community at such places as the local country clubs, library, our office, etc.

SCHEDULE CER 2014

ARIZONA DEPARTMENT OF WATER RESOURCES

BEST MANAGEMENT PRACTICES (BMPs) IMPLEMENTED PER YOUR MNPCCP REQUIREMENTS

Describe the following for each BMP:

1. Activities - What was developed, created or implemented, such as the processes, methods or events undertaken; where and how a program was made available; the participants or target audience.

Note: For a BMP implemented through participation in a partnership, describe the nature of your participationsuch as staff time, funding, and/or provision of supplies.

2. Results - What was accomplished, such as the number of activities, programs or materials created, the participants reached and their response, and other quantitative data.

3. Assessment - What worked and what needs modification or improvement; reasons for continuing or discontinuing an activity, such as whether or not a target audience was reached, materials or activities were effective, or the level of participation was adequate.

4. Plans - Whether or not a program or activity will be continued, discontinued, increased, decreased, or modified.

5. Explanation of Substitution (if applicable) -Identify any substitute BMPs, and describe the reasons for the substitution, when it was made and the relevance of the substitute BMP to your service area characteristics or water use patterns.

BMP Number	BMP Title	Activities, Results, Assessment, Plans, Substitutions
2.1	Adult Education	Water Wise Tips are put on each and every water bill. We also made educational brochures available at the community country clubs, our office, library, etc. This year we also made a monetary donation to a local water conservation club to assist with their low water usage demonstration plot. We accomplished reaching every connection, every month with educational material via their bills. The pamphlets distributed to locations throughout the community were available to a wide variety of residents. Response is very limited and hard to gauge. Our water use per connection per day has remained about the same. Feedback from customers is minimal. We produce an annual consumer confidence report which is mailed to each and every customer. On average, we receive 1 or 2 calls from over 9,000 customers. Results of using this current BMP is hard to quantify. I know that some customers have been made aware of using less water. However, the customers we serve are mostly retired They are made up of a generation that is already concerned about water use reduction for a few reasons. Mostly, they are aware of the finite amount of water available. Secondly, they are on fixed incomes. Furthermore, most of our customers have already opted for desert or xeriscape landscaping. We will continue using this BMP and will be adding others. Only additions will be made, no substitutions, to the current BMPs.
3.6, 3.7, and 3.8	Customer high water use and inquiry and resolution	We are very aggressive in this area. We do monthly audits on our billing registers. We automatically re-read meters that are above a preset limit. We often catch water leaks in irrigation systems, slab leaks, malfunctioning toilets and other water leaks. In the past we have not charged our customers for re-reading their meters due to high water use. We have changed that and no encourage them to read their own meters and call us for resolution. This educates them on much water they are using and helps them determine how their system works. We continue to give our customers the instructional hand outs on how to read their meters. We also offer to have the meters tested by the Corporation Commission to insure the accuracy of the meters. Activities remained the same with our continued concerns over high water use. Feedback from our customers is minimal. They are aggressive when they feel they are being billed for more water than used. Their income is a big concern to them and they watch their bills very closely. At the end of 2012, we were granted a new rate and it is a tiered rate structure. We will be using this as an additional BMP and not a replacement BMP. We will continue this approach. Our new water rates have been in place for a few years. This tiered rate strcture should help reduce the amount of water consumed.

SCHEDULE CER 2014

ARIZONA DEPARTMENT OF WATER RESOURCES

4.1, 4.2, and 4.3	Physical System evaluation and improvement	One of our disciplines is to visually identify the source of water that is running down the streets in the community. Our staff, as well as the community patrol, does daily inspections. The community patrol has been trained as to what to look for and identify. Often the water streams are leaks on our side of the meter. At this point, the service(s) are replaced as well as the meters. We repaired 62 service line leaks in 2014. If the water is coming from a residence, then an effort is made to contact the homeowner about the waste of water. During the winter months (most of the residents reside here during this time) we perform a zero water use audit. This audit is used to test meters and replace any that are not functioning properly. We continued to be aggressive with the replacement of meters. A total of 613 residential meters and 11 commercial meters were replaced in 2014. We do not allow water leaks to run for more than an average of 1 to 2 days. Our Water Plants are inspected daily and pumps are replaced and/or repaired as quickly as possible.
3.6, 3.7, and 3.8	Customer high water use and inquiry and resolution	One of the largest Homeowner's Associations has requested our assistance with accounting for and lowering their water consumption.
	Additional Notes:	One of our largest golf courses replaced a portion of their irrigation system and removed some turf from the course. Even though this course uses effluent and recovered effluent, ground water is also provided to the course.

OPTIONAL: BMPs IMPLEMENTED IN ADDITION TO THOSE DESCRIBED ABOVE

If you implemented more BMPs than required, please list and/or describe them. This will enable ADWR to assess and document water conservation efforts around the state

SIGN AND CERTIFY

SIGNATURE OF PERSON COMPLETING THIS FORM	Superintendent TITLE	03/18/2015 DATE
Dave Voorhees PRINTED NAME	Dave.Voorhees@Robson.com EMAIL ADDRESS	

More Information:

Description of the BMPs

Another copy of the Schedule CER form

Contact ADWR Water Management Division at (602) 771-8585 or Ruth Greenhouse mailto:rgreenhouse@azwater.gov

EXHIBIT WMG-4

This is the original annual report for authority: 56-000367.0000

Note created: 4/6/2015

--- The document starts on the next page. ---

ARIZONA DEPARTMENT OF WATER RESOURCES, 3550 NORTH CENTRAL AVENUE, PHOENIX, AZ 85012-2105

A 1
CER 1
D 1
EMNI 1
F1 1
S 1
WI 2

ANNUAL WATER WITHDRAWAL AND USE REPORT
PROVIDER SUMMARY 2014

OWNER OF GROUNDWATER RIGHT

QUAIL CREEK WATER COMPANY
ATTN: ED MACMEANS
40004 S. RIDGEVIEW BLVD
TUCSON AZ 85739

RECEIVED
MAR 31 2015
ARIZONA DEPARTMENT OF WATER RESOURCES

TYPE OF RIGHT
LARGE MUNICIPAL PROVIDER MNPCCP

RIGHT / PERMIT NO.
56-000367.0000

REPORTING PARTY
56-000367.0000
QUAIL CREEK WATER COMPANY
ED MACMEANS
40004 S RIDGEVIEW BLVD
TUCSON AZ 85739-

TUCSON AMA (602) 771-8585

If any of the information preprinted on this report is incorrect, please make the necessary changes.

PART I GROUNDWATER WITHDRAWN

From Box 10. Schedule A attached

624.80 X $ 3.00 = $ 1874.58

ACRE - FEET X Withdrawal Fee =

PART II WATER DELIVERED TO OTHER RIGHTS

From Box 24 Schedule D attached

0 ACRE - FEET

PART III WATER RECEIVED FROM OTHER RIGHTS

Total from Schedule E attached

496.20 ACRE - FEET

PART IV LATE FEES

Complete if filing after March 31. NOTE: A portion of a month after March 31 is counted as a full month.

1) Enter number of months late (Maximum of 6)

2) $ Calculate Late Report Fee ($25.00 X number of months late)

3) $ Calculate Late Payment Fee (10 % X number of months late X withdrawal fee calculated in Part I

PART V TOTAL FEES DUE

Add amounts from Parts I and IV

$ 1874.58

Mail or hand deliver this report, together with the appropriate schedules, worksheets and fees to the Arizona Department of Water Resources. If mailed, the report must be mailed to P.O. Box 36020 Phoenix, AZ. 85067 and postmarked no later than March 31, 2015. If hand delivered, the report must be received by the Department's Annual Reports & Planning Section no later than 5:00 PM on March 31, 2015.

REPORTS FILED AFTER MARCH 31, 2015 ARE SUBJECT TO LATE FEES (A.R.S. § 45-632) AND PAYMENT OF PREVIOUSLY WAIVED MONETARY PENALTIES ASSOCIATED WITH PRIOR GROUNDWATER CODE VIOLATIONS.

I hereby certify, under penalty of perjury, that the information contained in this report is, to the best of my knowledge and belief, true, correct and complete.

X _____ AUTHORIZED SIGNATURE

OPERATIONS MANAGER TITLE

3/23/15 DATE

STEVE SORIANO PRINTED NAME

480 895 5009 TELEPHONE NUMBER

NOTE: THIS REPORT MUST BE FILED EVEN IF NO WATER WAS DELIVERED PURSUANT TO THIS RIGHT.

ARIZONA DEPARTMENT OF WATER RESOURCES

SCHEDULE A

REPORT OF PUMPING

ANNUAL REPORT 2014

Owner

QUAIL CREEK WATER COMPANY

[1] **RIGHT/PERMIT/BMP Farm Unit NO.**

56-000367.0000

Note: Pumpage for each well must be shown on the attached well worksheets. Information for up to four wells may be shown on each worksheet.

[2] DWR WELL REGISTRATION NO.						[3] Depth to Static Water Level (Designated Providers Only)			[4]	RECOVERED WATER PUMPED				[9]
10 Q	40 Q	160 Q	LOCATION SEC	TWN	RNG	Date # 1 / Date # 2	Msmt # 1 / Msmt # 2	Well Running? (Y/N)	Ground-water Pumped	[5] CAP	[6] SW	[7] EFF/N	[8] EFF/OUT	Total Water Pumped
55-219145 12														
NE	NW	NE	8	18.0S	14.0E				487.31					487.31
55-608519														
SW	NW	SW	1	18.0S	13.0E									
55-608521														
NW	NE	NE	1	18.0S	13.0E									
55-608522 13														
NE	NW	SE	6	18.0S	14.0E				114.33					114.33
55-608597 11														
NW	SE	NW	8	18.0S	14.0E				33.22					33.22
55-608598 10														
SE	SE	NE	8	18.0S	14.0E				0					0
TOTAL WATER WITHDRAWN (acre-feet)									[10*] 1024.80					[11**] 1024.80

* ENTER TOTAL ACRE-FEET OF GROUNDWATER WITHDRAWN IN PART I OF THE SUMMARY PAGE.

rev. 10/14 ** ENTER ACRE-FEET OF TOTAL WATER PUMPED IN PART 4.D.1 OF THE SCHEDULE AWS.

ARIZONA DEPARTMENT OF WATER RESOURCES

SCHEDULE D

REPORT OF WATER DELIVERIES TO OTHER WATER RIGHTS

ANNUAL REPORT 2014

Owner

QUAIL CREEK WATER COMPANY

[1] **RIGHT/PERMIT/BMP Farm Unit NO.**

56-000367.0000

[2] RIGHT NO. DELIVERED TO / [3] TYPE OF RIGHT	[4] DWR WELL NUMBER	[5] CUSTOMER ACCOUNT NUMBER	[6] FILING ON BEHALF	[7] HOW MEASURED OR ESTIMATED	[A] ACRE-FEET DELIVERED BY TYPE OF WATER					TOTAL ACRE-FEET DELIVERED
					GW	CAP	EFF	SRP	Other SW	
58-105292.0036 / TYPE 1 GFR	55-608522			metered	80.65					80.65
73-581379.0000 / WATER STORAGE PERMIT										
Note: If you delivered water to a storage facility, enter the amounts on a UWS - Schedule.			TOTAL ACRE-FEET DELIVERED		[8] GW 80.65	[9] CAP	[10] EFF	[11] SRP	[12] Other SW	[13] 80.65

EXCHANGE WATER GIVEN

[14] EXCHANGE NO. RECEIVING WATER	[15] DWR WELL NO. IF APPLICABLE	[B] ACRE-FEET EXCHANGED BY TYPE OF WATER					TOTAL ACRE-FEET EXCHANGED
		GW	CAP	EFF	SRP	Other SW	
67-							
68-							
69-							
	TOTAL ACRE-FEET EXCHANGED	[16] TOT. GW	[17] TOT. CAP	[18] TOT. EFF	[19] TOT. SRP	[20] TOT. O. SW	[21]

ENTER BOX 22 IN PART II OF THE SUMMARY PAGE — TOTAL ACRE-FEET DELIVERED AND EXCHANGED — [22] 80.65

SCHEDULE E Part A -- Municipal

ARIZONA DEPARTMENT OF WATER RESOURCES

Note: If any information pre-printed on this form is incorrect, please make the necessary corrections. For information not already pre-printed on this form, please follow the directions below.

WATER RECEIVED FROM OTHER SOURCES

Owner: QUAIL CREEK WATER COMPANY

RIGHT NO.: 56-000367.0000

ANNUAL REPORT 2014

Part I -- Water Received from Primary Irrigation Districts / Municipal Providers

Irrigation District /Provider Number

Provider/District Name

Your District User/ Account Number

Number of acres eligible to receive surface water

Right / Permit Number Supplying Water	Measurement Method	Acre-feet Received by Water Type								
		Groundwater	In-lieu Groundwater	Decreed/ Appropri -ative	Normal Flow	Spillwater	CAP	Other	(Describe Other water)	Total Received
73-581379.0000	metered							EFFLUENT 1496.20		1496.20
Part I Total Acre-feet Received								1496.20		1496.20

Part II -- Water Received or Diverted from Sources Other Than Irrigation Districts / Municipal Providers

Right / Permit Number Supplying Water	Measurement Method	Acre-feet Received by Water Type							
		Groundwater	Decreed/ Appropri -ative	Normal Flow	Spillwater	CAP	Other	(Describe Other water)	Total Received
Part II Total Acre-feet Received									

PART III - Water Received Pursuant to a Permitted, Enrolled or Noticed Exchange Agreement

Exchange No. Supplying Water	Measurement Method	Exchange outside service area?	Payback for			Acre-feet Received in Exchange by Water Type					
			Quantity	Type	Year Given	GW	SRP	CAP	Effluent	Other SW	Total Received
67-											
68-											
69-											
Part III Total Acre-feet Received in Exchange											

Sch. E Part A Total acre-feet of Water Received or Diverted from Other Sources (Part I + Part II + Part III) 1496.20

rev. 10/14

ARIZONA DEPARTMENT OF WATER RESOURCES

SCHEDULE F-1 PART 3

MUNICIPAL PROVIDER DIRECT USE EFFLUENT

ANNUAL REPORT 2014

RECEIVED AUG 5 2015 ADWR

PROVIDER NAME

QUAIL CREEK WATER COMPANY

RIGHT/PERMIT NO.

56-000387.0000

AMENDED

Pursuant to the Third Management Plan, municipal water providers are required to supply the following information. Report the amount of effluent produced, received, delivered, reused, recharged or discharged in your service area in calendar year 2014. Please attach a list of all the plants at which wastewater generated by uses of water within your service area is treated. List the volume of effluent produced at each plant from uses of water within your service area during calendar year 2014.

Please include all effluent produced in your service area, even if it is sent to a regional or other wastewater treatment facility not owned or operated by you.

PART 1 - TOTAL AVAILABLE EFFLUENT

A. Effluent Produced from Uses of Water within your Service Area:

1.	Effluent produced within service area (include wastewater processed at all treatment plants/entities)	Ø af
2.	Effluent used as process water at treatment plants	Ø af
3.	PartA.1 - Part A.2 (total effluent produced within service area during CY 2014)	Ø af

B. Additional Effluent Sources:

1.	Effluent received from other water right holders	1496.20 af
2.	Effluent recovered as long-term storage credits pursuant to a Recovery Well (74) Permit (sum of recovered from all 74s)	Ø af
3.	Part B.1 + Part B.2 (total effluent used during CY 2014 that was not produced within the service area during CY 2014)	1496.20 af

C. Total Available Effluent:

1.	Total from Part 1.A.3 above + Total from Part 1.B.3 above:	1496.20 af

PART 2 - TOTAL EFFLUENT USE

A. Effluent Delivered/Used within your Service Area:

1.	Effluent delivered/used within your service area for landscape watering	Ø af
2.	Effluent delivered/used within service area for other purposes (please attach additional sheets and list and describe each use separately	Ø af
3.	Part 2.A.1 + Part 2.A.2 (total effluent use within your service area during 2014)	Ø af

B. Effluent Delivered to Other Rights/Permits (as shown on your Schedule D form):

1.	Total Effluent delivered to other water rights/permits	Ø af

C. Total Available Effluent:

1.	Effluent delivered to recharge projects as reported on Water Storage Reports (73s)	1496.20 af
2.	Effluent delivered/used (from Part 2.A) that is recovered annual storage credits:	Ø af
3.	Part 2.C.1 – Part 2.C.2 (total effluent used for storage projects before evaporation or cuts to the aquifer)	1496.20 af

D. Effluent Delivered to Entities Other than Rights/Permits/Water Storage Uses:

1.	Effluent delivered for additional uses not associated with a right/permit/water storage use	Ø af
	Please explain:	

PART 3 - TOTAL EFFLUENT DISCHARGED

A. Effluent Discharged:

1.	Total effluent discharged (not recharged, delivered, or used)	Ø af

Please contact the AMA Office if you need assistance completing this form.

(602) 771-8585

ARIZONA DEPARTMENT OF WATER RESOURCES

UWS - SCHEDULE

ANNUAL REPORT 2014

ADWR
AUG 5 2015
RECEIVED

AMENDED

PERMIT HOLDER: ROBSON RANCH QUAIL CREEK, LLC

LTSA NO. 70-411250.0000

STORAGE SAVINGS FACILITY INFORMATION

PLEASE ATTACH 2 COPIES OF ANY SUPPLEMENTAL MATERIAL REQUIRED BY THE PERMITS

Facility Permit No. (1)	Facility Name (2)	Water Storage Permit No. (3)	Water Storage Permit Holder (4)	Volume of Water Delivered to Facility (Acre-Feet) (5)					Total Volume Delivered By Each Storer (Acre-feet) (6)
				CAP	EFFLUENT	SURFACE	SPILL	NCS	
71-581379.0001	ROBSON RANCH QUAIL CREE	73-581379.0000	ROBSON RANCH QUAIL CREEK, LL		1496.20				1496.20
Total volume of water delivered to this facility [Enter zero if water was not delivered].									1496.20

WATER STORAGE INFORMATION

Water Storage Permit No. (1)	Facility Permit No. (2)	Facility Name (3)	Volume of Water Delivered to Facility (Acre-Feet) (4)					Total Volume of Water Delivered (Acre-feet)
			CAP	EFFLUENT	SURFACE	SPILL	NCS	
73-581379.0000	71-581379.0001	ROBSON RANCH QUAIL CREEK USF		1496.20				1496.20
		TOTAL WATER DELIVERED		1496.20				1496.20

A zero must be entered if water was not delivered pursuant to a water storage permit

ARIZONA DEPARTMENT OF WATER RESOURCES

SCHEDULE F-1 PART 1

POPULATION

ANNUAL REPORT 2014

PROVIDER NAME

[1] QUAIL CREEK WATER COMPANY

RIGHT/PERMIT NO.

56-000367.0000

Pursuant to the Third Management Plan, municipal water providers are required to supply the following information. This information is used to determine actual and target GPCD numbers for Large Municipal Providers and for planning information for Small Municipal Providers.

DEFINITION OF A HOUSING UNIT

A housing unit means a group of rooms or a single room occupied as separate living quarters. Examples of a housing unit include a single-family home, a townhouse, a condominium, an apartment, a permanently setup mobile home or a unit in a multi-family complex. A housing unit may be occupied by a family, a family and unrelated persons living together, two or more unrelated persons living together, or by one person. The number of housing units is ***not*** the number of service connections. Mobile homes in an overnight or limited-stay mobile home park or a unit in a campground, motel, hotel, or other temporary lodging facility are not considered housing units.

SINGLE-FAMILY HOUSING

A single-family housing unit is a detached dwelling. Include mobile homes ***not*** located in a mobile home park.

Single-Family Housing	**Housing Units**
Single-family housing units *(not service connections)* as of July 1, 2013.	[2] 1879
Indicate the net change (added and deleted) of single-family housing units *(not service connections)* in your service area between July 1, 2013 and July 1, 2014.	[3] 47
Total single-family housing units *(not service connections)* as of July 1, 2014.	[4] 1926

MULTI-FAMILY HOUSING

A multi-family housing unit is a mobile home in a mobile home park or any permanent housing unit having one or more common walls with another housing unit located in a multi-family residential structure, including a unit in a duplex, triplex, four-plex, condominium development, townhouse development or apartment complex. Include mobile homes if they are located in a mobile home park. Do not include mobile homes that are located in an overnight or limited stay mobile home park.

Multi-Family Housing	**Housing Units**
Multi-family housing units *(not service connections)* as of July 1, 2013.	[5] 0
Indicate the net change (added and deleted) of multi-family housing units *(not service connections)* in your service area between July 1, 2013 and July 1, 2014.	[6] 0
Total multi-family housing units *(not service connections)* as of July 1, 2014.	[7] 0

Please contact the AMA Office if you need assistance completing this form.

(602) 771-8585

ARIZONA DEPARTMENT OF WATER RESOURCES

SCHEDULE F-1 PART 2

MUNICIPAL PROVIDER WATER DELIVERIES

PROVIDER NAME

[1] QUAIL CREEK WATER COMPANY

RIGHT/PERMIT NO.

56-000367.0000

ANNUAL REPORT 2014

Total Production 624.826

Pursuant to the Third Management Plan (TMP) and the Groundwater Code, large water providers are required to supply the following information. Do not include direct use effluent on this schedule (please use Part 3 of Schedule F-1).

MONTH	DELIVERIES IN ACRE-FEET									
	RESIDENTIAL [A]		NON-RESIDENTIAL [B]							TOTAL
	Single Family	Multi-Family	Industrial	Commercial	Govt.	Turf Related Facilities*	Other Turf **	Construction	Other ***	
Jan	32.71			3.01			1.16	6.49		43.37
Feb	30.10			2.87			.85	1.10		34.92
Mar	33.23			1.88			2.75	1.91		39.77
Apr	38.67			2.65			4.03	2.85		48.20
May	32.64			2.72			5.08	1.37		41.81
Jun	39.36			2.78			5.70	.71		48.55
Jul	38.57			3.68			6.36	.18		48.79
Aug	31.72			1.96			5.23	1.74		40.65
Sep	35.50			1.68			4.40	1.79		43.42
Oct	32.70			1.65			2.34	.04		37.72
Nov	34.20			2.06			3.50	.99		40.81
Dec	31.69			1.69			3.09	.26		36.73
Total Deliveries	[2] 411.19	[3]	[4]	[5] 28.63	[6]	[7]	[8] 45.50	[9] 19.42	[10]	[11] 624.74
Total Active Connections	[12] 1970	[13]	[14]	[15] 87	[16]	[17]	[18] 31	[19]	[20]	[21] 2088

* Turf Related Facilities includes turf-related facilities (10 or more acres of turf or other high water use landscaping) and landscaped public rights-of-way identified as Individual Users.

** Other Turf includes water delivered to other turf areas that are less than 10 acres.

*** Other includes unmetered deliveries. Unmetered deliveries must be calculated using a generally accepted method of estimating water use. Explain in a separate letter how any unmetered deliveries were calculated and to which category it would belong if it were metered. e.g. Industrial, Commercial, etc.

Please contact the AMA Office if you need assistance completing this form.

(602) 771-8585

ARIZONA DEPARTMENT OF WATER RESOURCES

SCHEDULE F-1 PART 3

MUNICIPAL PROVIDER DIRECT USE EFFLUENT

ANNUAL REPORT 2014

PROVIDER NAME

QUAIL CREEK WATER COMPANY

RIGHT/PERMIT NO.

56-000367.0000

Pursuant to the Third Management Plan, municipal water providers are required to supply the following information. Report the amount of effluent produced, received, delivered, reused, recharged or discharged in your service area in calendar year 2014. Please attach a list of all the plants at which wastewater generated by uses of water within your service area is treated. List the volume of effluent produced at each plant from uses of water within your service area during calendar year 2014.

Please include all effluent produced in your service area, even if it is sent to a regional or other wastewater treatment facility not owned or operated by you.

PART 1 - TOTAL AVAILABLE EFFLUENT

A. Effluent Produced from Uses of Water within your Service Area:

1.	Effluent produced within service area (include wastewater processed at all treatment plants/entities)	af
2.	Effluent used as process water at treatment plants	af
3.	PartA.1 - Part A.2 (total effluent produced within service area during CY 2014)	af

B. Additional Effluent Sources:

1.	Effluent received from other water right holders	af
2.	Effluent recovered as long-term storage credits pursuant to a Recovery Well (74) Permit (sum of recovered from all 74s)	af
3.	Part B.1 + Part B.2 (total effluent used during CY 2014 that was not produced within the service area during CY 2014)	af

C. Total Available Effluent:

1.	Total from Part 1.A.3 above + Total from Part 1.B.3 above:	af

PART 2 – TOTAL EFFLUENT USE

A. Effluent Delivered/Used within your Service Area:

1.	Effluent delivered/used within your service area for landscape watering	af
2.	Effluent delivered/used within service area for other purposes (please attach additional sheets and list and describe each use separately	af
3.	Part 2.A.1 + Part 2.A.2 (total effluent use within your service area during 2014)	af

B. Effluent Delivered to Other Rights/Permits (as shown on your Schedule D form):

1.	Total Effluent delivered to other water rights/permits	af

C. Total Available Effluent:

1.	Effluent delivered to recharge projects as reported on Water Storage Reports (73s)	af
2.	Effluent delivered/used (from Part 2.A) that is recovered annual storage credits:	af
3.	Part 2.C.1 – Part 2.C.2 (total effluent used for storage projects before evaporation or cuts to the aquifer)	af

D. Effluent Delivered to Entities Other than Rights/Permits/Water Storage Uses:

1.	Effluent delivered for additional uses not associated with a right/permit/water storage use	af
	Please explain:	

PART 3 – TOTAL EFFLUENT DISCHARGED

A. Effluent Discharged:

1.	Total effluent discharged (not recharged, delivered, or used)	0 af

Please contact the AMA Office if you need assistance completing this form.

(602) 771-8585

SCHEDULE S

SERVICE AREA MAP UPDATE

ANNUAL REPORT 2014

ARIZONA DEPARTMENT OF WATER RESOURCES

PROVIDER NAME

QUAIL CREEK WATER COMPANY

RIGHT/PERMIT NO.

56-000367.0000

Pursuant to A.R.S. §45-498 each city, town, private water company and irrigation district in an active management area shall maintain a current map clearly delineating its service area and distribution system in the director's office and shall furnish such other related data as the director may require.

2014 ANNUAL SERVICE AREA AND OPERATING DISTRIBUTION SYSTEM UPDATES RESPONSE FORM

Please complete and return THIS FORM along with your UPDATED DISTRIBUTION SYSTEM (WATER LINE) MAP and WATER SERVICE AREA BOUNDARY MAP to ADWR by MARCH 31, 2015 along with your 2014 ANNUAL WATER WITHDRAWAL & USE REPORT.

Service Area Map Contact Information:

If the contact person in your office for service area map updates has changed in the last year, please email ADWR with the updated contact person information. Please send that information to data_management@azwater.gov.

Please check the appropriate boxes:

OPERATING DISTRIBUTION SYSTEM MAP

Your ***operating distribution system*** includes your water lines, wells, storage tanks, water treatment facilities and related infrastructure used to treat and distribute water to your customers. If you have added any new water lines, wells, treatment or storage facilities over the last calendar year, please submit an updated map.

Were there changes to the operating distribution system within the last year? ( ) Yes (X) No

WATER SERVICE AREA BOUNDARY MAP

Your ***service area boundary*** is an area delineated as a 100 foot buffer around the exterior of your water lines, excluding any small municipal providers, other large municipal providers, or areas that you do not serve (exempt domestic well areas) within the exterior boundary of your water lines.

Were there changes to the area in service within the last year ? ( ) Yes (X) No

If there were changes to either your operating distribution system or your water service area boundary, please submit an updated map(s) in one of the following formats:

- Digital ArcGIS Shapefile
- Digital ArcGIS geodatabase file
- Digital AutoCAD file
- .pdf File
- Hardcopy (If no electronic form exists)

SUBMIT ALL MAP REVISIONS BY MARCH 31, 2015. If you would like to submit your map by uploading to ADWR's ftp or Infoshare websites, please call the Active Management Area at (602) 771-8585 or email us for instructions at data_management@azwater.gov.

Name-Printed	Title	Phone
STEVE SORENTO	OPERATOR	480 895 5009
Signature	**Date**	**Email**
	3/23/15	

Please contact the AMA Office if you need assistance completing this form.

(602) 771-8585

WORKSHEET W-1 2014

GROUNDWATER RIGHT/PERMIT/ BMP Farm Unit NO. 56-000367.0000

---

1 DWR WELL REGISTRATION NO.	10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
55-219145 #12	NE	NW	NE	8	18.0S	14.0E

2 TYPE OF MEASURING DEVICE: NO MEASURING DEVICE SPECIFI	MAKE / MODEL:
SIZE:	UNITS MEASURED:
INSTALLATION OR OVERHAUL DATE:	

3 POWER CO. NAME	ACCOUNT NO.	POWER METER NO.
TEP	2938770274	

ENERGY CONSUMPTION	UNITS
395400	KWH

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☐

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	**6** ENDING	**7** DIFFERENCE
216605000	375395000	158790000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET	487.31	**9** BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	487.31

---

1 DWR WELL REGISTRATION NO.	10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
55-608519	SW	NW	SW	1	18.0S	13.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER	MAKE / MODEL:
SIZE:	UNITS MEASURED:
INSTALLATION OR OVERHAUL DATE:	

3 POWER CO. NAME	ACCOUNT NO.	POWER METER NO.

ENERGY CONSUMPTION	UNITS

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☐

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	**6** ENDING	**7** DIFFERENCE

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET		**9** BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	

---

1 DWR WELL REGISTRATION NO.	10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
55-608521	NW	NE	NE	1	18.0S	13.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER	MAKE / MODEL:
SIZE:	UNITS MEASURED:
INSTALLATION OR OVERHAUL DATE:	

3 POWER CO. NAME	ACCOUNT NO.	POWER METER NO
TUCSON ELECTRIC POWER	0191-7875-3	3AC-497

ENERGY CONSUMPTION	UNITS

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☒

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	**6** ENDING	**7** DIFFERENCE

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET		**9** BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	

---

1 DWR WELL REGISTRATION NO.	10 Q	40 Q	160 Q	LOCATION Sec	Twn	Rng
55-608522 #13	NE	NW	SE	6	18.0S	14.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER	MAKE / MODEL: Water Specialties
SIZE: 6"	UNITS MEASURED:
INSTALLATION OR OVERHAUL DATE: 1/11	

3 POWER CO NAME	ACCOUNT NO.	POWER METER NO.
TRICO ELECTRIC POWER	0102115009 / 019704175	3AC166

ENERGY CONSUMPTION	UNITS
84760	KWH

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☒

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	**6** ENDING	**7** DIFFERENCE
305823000	339818000	33995000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET	104.33	**9** BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	104.33

WORKSHEET W-1 2014

GROUNDWATER RIGHT/PERMIT/ BMP Farm Unit NO. 56-000367.0000

1 DWR WELL REGISTRATION NO. 55-608597 #11

10 Q	40 Q	160 Q	Sec	Twn	Rng
NW	SE	NW	8	18.0S	14.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER
MAKE / MODEL: Water Specialties
SIZE: 6"
UNITS MEASURED: GAL
INSTALLATION OR OVERHAUL DATE: 6/08

3

POWER CO. NAME	ACCOUNT NO.	POWER METER NO.
TRICO ELECTRIC POWER	5268518416	TR9-3275

ENERGY CONSUMPTION	UNITS
40000	KWH

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☒

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE
60535000	71361000	10826000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE

8 ACRE FEET	33.22	9 BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	33.22

---

1 DWR WELL REGISTRATION NO 55-608598 #16

10 Q	40 Q	160 Q	Sec	Twn	Rng
SE	SE	NE	8	18.0S	14.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER
MAKE / MODEL: Water Specialties
SIZE: 8"
UNITS MEASURED:
INSTALLATION OR OVERHAUL DATE: 6/08

3

POWER CO. NAME	ACCOUNT NO	POWER METER NO
TUCSON ELECTRIC POWER	3625113576	SC16-6197

ENERGY CONSUMPTION	UNITS
0	KWH

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☒

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE
20277000	20277000	0

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET	0	9 BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	0

---

1 DWR WELL REGISTRATION NO

10 Q	40 Q	160 Q	Sec	Twn	Rng

2 TYPE OF MEASURING DEVICE
MAKE / MODEL
SIZE
UNITS MEASURED
INSTALLATION OR OVERHAUL DATE

3

POWER CO. NAME	ACCOUNT NO.	POWER METER NO

ENERGY CONSUMPTION	UNITS

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☐

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET		9 BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	

---

1 DWR WELL REGISTRATION NO.

10 Q	40 Q	160 Q	Sec	Twn	Rng

2 TYPE OF MEASURING DEVICE
MAKE / MODEL
SIZE
UNITS MEASURED
INSTALLATION OR OVERHAUL DATE

3

POWER CO. NAME	ACCOUNT NO.	POWER METER NO.

ENERGY CONSUMPTION	UNITS

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP ? Yes ☐ No ☐

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET		9 BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in one of Columns 4-8 of Schedule A

10 TOTAL IN ACRE-FEET	

SCHEDULE CER 2014

ARIZONA DEPARTMENT OF WATER RESOURCES

CONSERVATION EFFORTS REPORT

MODIFIED NON-PER CAPITA CONSERVATION PROGRAM

ANNUAL REPORT 2014

SERVICE AREA INFORMATION		
Total residential and non-residential connections reported on your most recent Provider Profile:	_2000_____	X Tier 1 (1 – 5000) ☐ Tier 2 (5001 – 30,000) ☐ Tier 3 (more than 30,000)
Total residential and non-residential connections as of December 31, 2013: *(See Schedule F1, Part 2, Box 21)*	_2,078_____	X Tier 1 (1 – 5000) ☐ Tier 2 (5001 – 30,000) ☐ Tier 3 (more than 30,000)
Did your system transition to a higher tier during this reporting year? If yes, has a new Provider Profile been submitted?	Yes ☐ Yes ☐	No X No ☐ If no, please attach
Have you submitted a copy of your current rate structure to ADWR?	Yes X	No ☐ If no, please attach.

PUBLIC EDUCATION PROGRAM

See page 3 for additional instructions. You may attach additional pages, information, or materials.

1. Communication to Customers: Describe how you communicated to customers (at least twice per year) about the importance of conservation and the availability of water conservation information.

- Included in the message box of every bill are water conservation tips and ideas.

2. Written Materials: Describe the free written conservation information you provided to customers. Include the locations where available and your plans for the current calendar year.

- Water Wise pamphlets are available at all Club Houses in SaddleBrooke and at Quail Creek Water Office.
- Customers who request pamphlets will be instructed to pick them up at the Club House, Quail Creek Water Office, or one can be mailed.

SCHEDULE CER 2014

ARIZONA DEPARTMENT OF WATER RESOURCES

BEST MANAGEMENT PRACTICES (BMPs) IMPLEMENTED PER YOUR MNPCCP REQUIREMENTS

Describe the following for each BMP:

1. Activities - What was developed, created or implemented, such as the processes, methods or events undertaken; where and how a program was made available; the participants or target audience.

Note: For a BMP implemented through participation in a partnership, describe the nature of your participation such as staff time, funding, and/or provision of supplies.

2. Results - What was accomplished, such as the number of activities, programs or materials created, the participants reached and their response, and other quantitative data.

3. Assessment - What worked and what needs modification or improvement; reasons for continuing or discontinuing an activity, such as whether or not a target audience was reached, materials or activities were effective, or the level of participation was adequate.

4. Plans - Whether or not a program or activity will be continued, discontinued, increased, decreased, or modified.

5. Substitution Explanation if Applicable - Describe the reasons for the substitution, when it was made and the relevance of the substitute BMP to your service area characteristics or water use patterns.

BMP Number	BMP Name	
3.6	Customer inquiry resolution for high consumption	Quail Creek has implemented a program to address all customer inquiries regarding high water use rates. This program has been implemented since the utility initiated water service to customers. Upon receipt of an inquiry, a work order is sent out into the field where Mr. MacMeans is responsible for customer contact and site visit to determine the cause of the increase in the water bill. In addition, Mr. MacMeans keeps a record of the inquiries including any follow up activities.
3.7	High consumption notification for customers	Quail Creek utilizes a billing program that sends an alert to staff when water usage is over 20,000 gallons. Upon receipt of the alert, the billing clerk reviews the customer's previous water use history to determine if this usage is out of the ordinary. If this usage is not consistent with the customers history the meter is re-read with a brief site investigation (to determine if the meter is turning, does it appear that the customers are gone, is there appearance of a leak or a bad irrigation system problem such as over-grown vegetation or large wet spots on the ground). Quail Creek makes every effort to contact the homeowner by phone to alert them of the high usage and possible problem. If requested by the customer a water meter tech is dispatched to meet with the customer to assist them in a resolution to the problem.
4.1	Leak detection program	Quail Creek implements an inspection and leak detection program throughout its system. Physical system losses are determined and, if needed, notices to residential customers are issued to address leaks in the distribution system. This program has been implemented since the utility initiated water service to customers. Effective and timely monitoring limits high water use due to the customer base being highly aware of water conservation efforts.
4.2	Meter Repair and Replacement	This program includes a routine monthly audit at well meters and customer meter reports. If any problems with meters are identified, Quail Creek Water Company will immediately implement a replacement and/or repair at devices as needed. It is Quail Creek Water Company's experience that prompt repair/replacement of water meters enables residents and businesses to accurately determine water usage and cost. This allows consumers to better regulate this water use. The program is relevant and applicable to all customers in our water service area.

SCHEDULE CER 2014

ARIZONA DEPARTMENT OF WATER RESOURCES

3.8	Water Waste Investigations and Information	Quail Creek currently has a process of investigation to aid in water conservation among our customers. Any complaints relevant to water waste are transferred to a hard copy in the form of a Work Order containing details such as; resident address, name, account number, questions/concerns and what the problem is. This Work Order is documented in a log book and then sent out into the field where a water technician performs a site inspection and educates the customer on best management practices for water usage and how best to solve any problem that might be occurring. The water technician is responsible for documenting any education advice as well as date, time, and any relevant information on the Work Order, which is then returned to the office and based on order of return is followed up with a phone call.

OPTIONAL: BMPs IMPLEMENTED IN ADDITION TO THOSE DESCRIBED ABOVE

If you implemented more BMPs than required, please list and/or describe them. This will enable ADWR to assess and document water conservation efforts around the state.

N/A

SIGN AND CERTIFY

Ed MacMeans	Superintendent	2/26/2015
SIGNATURE OF PERSON COMPLETING THIS FORM	TITLE	DATE
Ed MacMeans	LDOWCO@YAHOO.COM	
PRINTED NAME	EMAIL ADDRESS	

-If you need help or have questions, contact ADWR Water Management Division at (602) 771-8585.

-For another copy of the Schedule CER form, go to Current Annual Reports at: http://www.azwater.gov/AzDWR/PermitsFormsApplications.

-For more information about the MNPCCP, visit http://www.azwater.gov/mnpccp.

EXHIBIT WMG-5

Approved
June 4, 2015

CENTRAL ARIZONA GROUNDWATER REPLENISHMENT DISTRICT FINAL 2015/16 - 2019/20 RATE SCHEDULE

CENTRAL ARIZONA GROUNDWATER REPLENISHMENT DISTRICT ASSESSMENT RATES

Units = $/acre-foot

	2013/14	Firm 2014/15	Firm 2015/16	Advisory 2016/17	2017/18	2018/19	2019/20
Phoenix Active Management Area							
Water & Replenishment Component [1]	$ 160	**$ 172**	**$ 179**	$ 186	$ 196	$ 201	$ 222
Administrative Component [2]	45	**45**	**45**	42	38	34	30
Infrastructure & Water Rights Component [3]	245	**294**	**353**	353	353	353	333
Replenishment Reserve Charge [4]	58	**63**	**67**	70	71	76	85
Total Assessment Rate ($/AF)	$ 508	**$ 574**	**$ 644**	$ 651	$ 658	$ 664	$ 670
Pinal Active Management Area							
Water & Replenishment Component [1]	$ 140	**$ 155**	**$ 160**	$ 165	$ 173	$ 178	$ 198
Administrative Component [2]	45	**45**	**45**	42	38	34	30
Infrastructure & Water Rights Component [3]	245	**294**	**353**	353	353	353	333
Replenishment Reserve Charge [4]	65	**70**	**75**	81	85	91	101
Total Assessment Rate ($/AF)	$ 495	**$ 564**	**$ 633**	$ 641	$ 649	$ 656	$ 662
Tucson Active Management Area							
Water & Replenishment Component [1]	$ 183	**$ 196**	**$ 202**	$ 206	$ 214	$ 219	$ 238
Administrative Component [2]	45	**45**	**45**	42	38	34	30
Infrastructure & Water Rights Component [3]	245	**294**	**353**	353	353	353	333
Replenishment Reserve Charge [4]	75	**80**	**85**	90	92	98	111
Total Assessment Rate ($/AF)	$ 548	**$ 615**	**$ 685**	$ 691	$ 697	$ 704	$ 712
Contract Replenishment Tax - Scottsdale [5]							
Cost of Water	$ 144	**$ 166**	**$ 179**	$ 184	$ 190	$ 196	$ 199
Cost of Transportation	0	**0**	**0**	0	0	0	0
Cost of Replenishment	0	**0**	**0**	0	0	0	0
Administrative Component [2]	45	**45**	**45**	42	38	34	30
Total Tax Rate ($/AF)	$ 189	**$ 211**	**$ 224**	$ 226	$ 228	$ 230	$ 229

ENROLLMENT & ACTIVATION FEES

Units = $/Housing Unit

Enrollment Fee [6]	$ 198	**$ 237**	**$ 284**	$ 284	$ 284	$ 284	$ 284
Activation Fee - Minimum [7]	$ 196	**$ 235**	**$ 282**	$ 282	$ 282	$ 282	$ 282
Activation Fee - Phoenix AMA [7]	$ 196	**$ 260**	**$ 350**	$ 460	$ 610	$ 820	$1,080
Activation Fee - Pinal Post-2007 [7]	$ 196	**$ 260**	**$ 350**	$ 460	$ 610	$ 820	$1,080
Activation Fee - Tucson AMA [7]	$ 196	**$ 250**	**$ 320**	$ 400	$ 510	$ 640	$ 810

ANNUAL MEMBERSHIP DUES

Member Land Annual Membership Dues ($/Lot) [8]							
Phoenix Active Management Area	$13.19	**$15.45**	**$20.78**	tbd	tbd	tbd	tbd
Pinal Active Management Area	$ 1.74	**$ 2.05**	**$ 2.80**	tbd	tbd	tbd	tbd
Tucson Active Management Area	$ 8.38	**$ 9.87**	**$13.21**	tbd	tbd	tbd	tbd
Member Service Area Annual Membership Dues ($/AF) [8]	$20.08	**$23.67**	**$32.34**	tbd	tbd	tbd	tbd

Approved
June 4, 2015

CENTRAL ARIZONA
GROUNDWATER REPLENISHMENT DISTRICT
FINAL 2015/16 - 2019/20 RATE SCHEDULE

NOTES:

1) The Water & Replenishment Component covers the projected annual costs of satisfying replenishment obligations, including the purchase of long-term storage credits (LTSC) and the purchase and replenishment of water and effluent. For the Phoenix Active Management Area (AMA), replenishment is planned to be accomplished at direct underground storage facilities (USFs) and groundwater savings facilities (GSFs). For the Pinal AMA, replenishment is planned to be accomplished at GSFs. For the Tucson AMA, replenishment is planned to be accomplished at USFs.
2) The Administrative Component covers CAGRD administrative costs, except labor related costs associated with the acquisition of infrastructure and water rights. A $2/AF has been added to this component to fund the Board's CAGRD conservation program.
3) The Infrastructure & Water Rights Component covers the cost to develop additional water supplies and the cost to construct additional infrastructure as the need arises.
4) The Replenishment Reserve Charge covers costs associated with establishing a replenishment reserve of LTSCs as provided in ARS Sections 48-3774.01 and 48-3780.01.
5) The components of the Contract Replenishment Tax - Scottsdale reflect the provisions in the Water Availability Status Contract to Replenish Groundwater between CAWCD and Scottsdale.
6) The Enrollment Fee is collected pursuant to the CAGRD Enrollment Fee and Activation Fee Policy adopted by the Board on May 1, 2008. A $2 per housing unit is included in the Enrollment Fee to help fund CAGRD's conservation program.
7) The Activation Fees is in accordance with the Preliminary 2014/15 - 2019/20 CAGRD Activation fee schedule adopted by the Board on November 7, 2013.
8) The Annual Membership Dues for Member Lands and Member Service Areas are pursuant to ARS Sections 48-3772.A.8. and 48-3779 as well as the Policy on Collection of CAGRD Annual Membership Dues adopted by the Board on April 7, 2011. The advisory rate beginning 2016/2017 are listed as "to be determined" (tbd) as the membership dues formula requires discussion and possible revision before the 2016/2017 rates are established.

EXHIBIT WMG-6

SECTION THREE

Conservation

Water conservation and the efficient use of water are critical components of integrated resources planning. Tucsonans have long embraced an ethic of water conservation. Water savings generated through behavioral changes and efficiency programs have had a positive impact on the overall water supply. This is evident as Tucsonans are today using the same volume of water as they used in the mid-1990s, despite a large increase in population (see Figure 3-1). With use of CAP water, the amount of mined groundwater has been reduced to levels from the 1940s.

The community response to water conservation efforts is unique in that reductions that began in the mid-1970s have been sustained. Information and education programs that form the foundation for all other programmatic efforts have established Tucson in the forefront of the field of water conservation. As shown in Figure 3-2, it remains among the largest communities in the American Southwest that maintain a low level of per capita water use.

Water issues tend to be area-specific in nature, and the solutions must reflect that reality. This is also true of water conservation programs because each water utility must deal with unique circumstances. A community suffering from impacts of a seasonal drought will institute restrictions to address a temporary water supply issue. That response differs when there is adequate water supply, but insufficient infrastructure or diminished delivery capabilities.

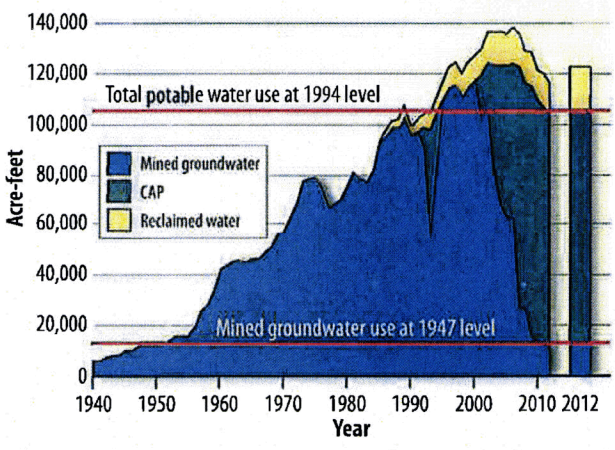

***Figure 3-1.** Water use in Tucson since the 1940s*

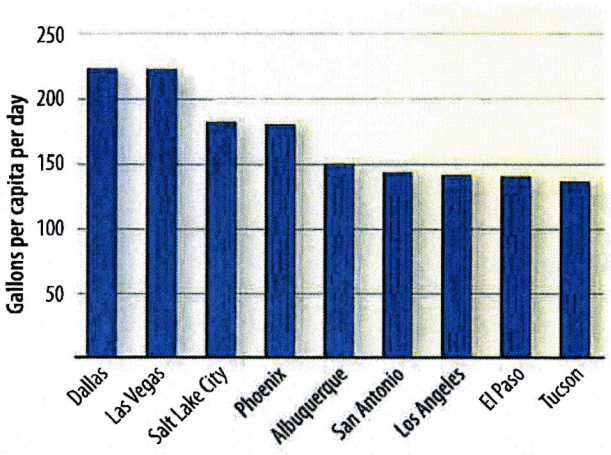

***Figure 3-2.** Per capita water use in select Southwestern cities*

All water utilities should strive for efficient water use throughout the community, but the local drivers will dictate how a program is developed, what specific measures should be implemented, and how they are evaluated with respect to water use and cost effectiveness. A well-planned conservation program provides an appropriate response to the need it is attempting to address.

In the case of Tucson Water, the conservation program that began in 1976 as "Beat the Peak" was developed in response to inadequate infrastructure to meet peak summertime demands. As time progressed, the regulatory environment changed, public perception shifted, and investments were made in infrastructure and water supplies. As a result, the drivers behind the need to promote water conservation and the efficient use of water have changed.

The highly successful "Beat the Peak" program was rebranded to reflect this change. The new program, "Be WaterSmart," more accurately reflects the current need to consider demand management strategies that promote sustainable water use.

This section of the Water Plan identifies drivers for the "Be WaterSmart" conservation program and provides guidance for future efforts. Despite changes in drivers over time, the long-term effort to conserve water must continue to play an integral role in the community's water management plan. A successful demand management program ensures that quality of life is not diminished. Reductions in water use from a conservation program should not aggravate operational or environmental conditions in the community.

Accounts and Usage per Service

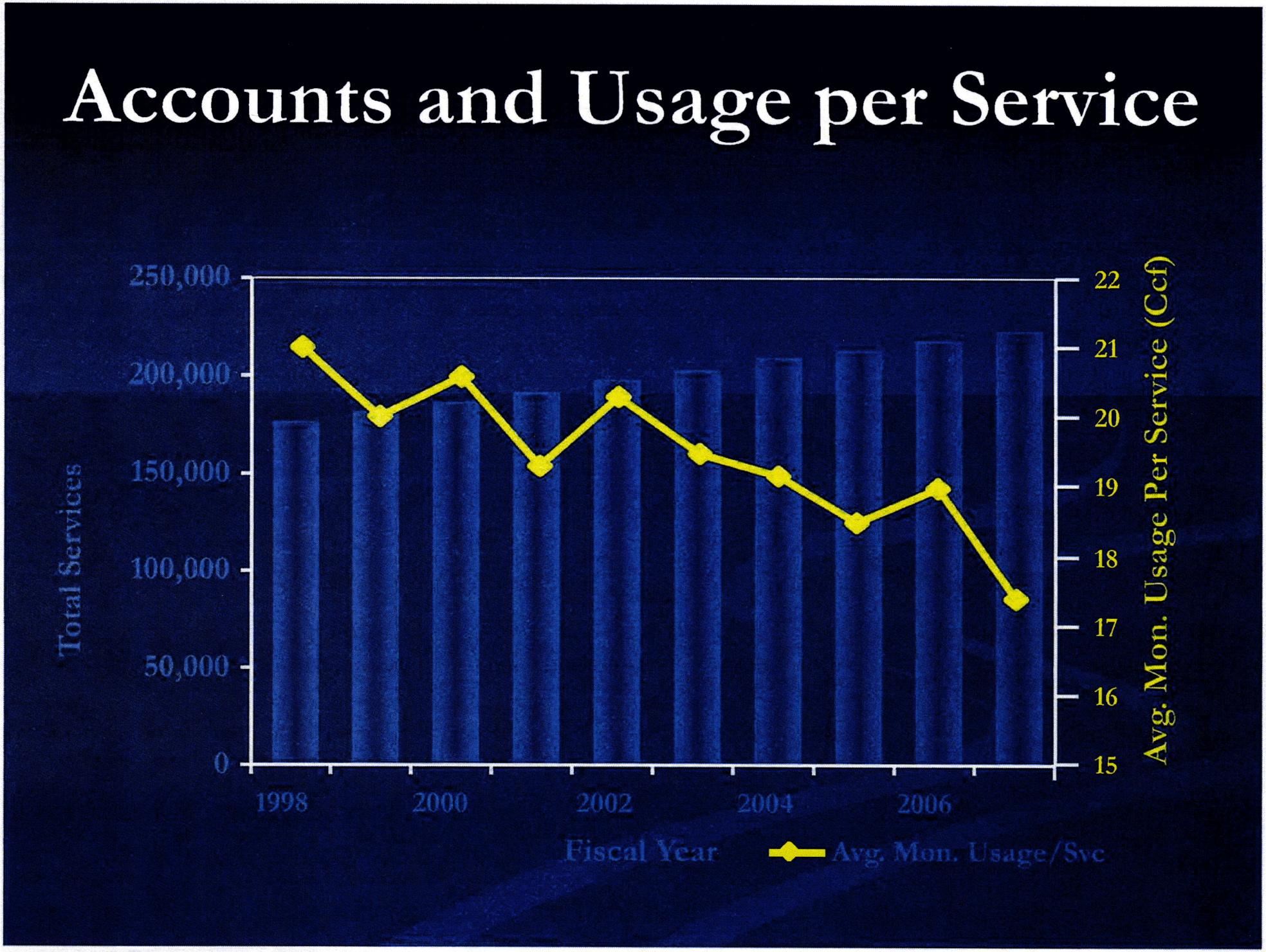

EXHIBIT WMG-7

WATER RATES

ARIZONA WATER COMPANY		A.C.C. No.	413
Phoenix, Arizona		Cancelling A.C.C. No.	None
Filed by:	R. E. Polenske	Tariff or Schedule No.	RW-256
Title:	President	Filed:	12-1-89
Date of Original Filing:	12-01-89	Effective:	For all service rendered on or after
System:	**APACHE JUNCTION**		January 1, 1990

RECLAIMED WATER SERVICE

AVAILABILITY:

Reclaimed water service to specific portions of Gold Canyon Resort and elsewhere as provided, limited, and delineated in that certain Agreement dated March 15, 1989 between Arizona Water Company, Gold Canyon Sewer Company, and Superstition Mountain Investment, Ltd. (the "Reclaimed Water Agreement"), approved by the Arizona Corporation Commission in Decision No. 56631 on September 14, 1989.

RATE: $250.00 per acre foot; or such rate as the Arizona Corporation Commission approves; plus the applicable monthly minimum charge as set forth in the Arizona Water Company Apache Junction General Service tariff schedule, for appropriate meter size and applicable taxes and governmental levies pursuant to Paragraphs 4 and 11 of the Reclaimed Water Agreement.

TERMS AND CONDITIONS:

Subject to the terms and conditions of the Reclaimed Water Agreement and the applicable rules, regulations, and conditions of Arizona Water Company and the Arizona Corporation Commission.

Exhibit B

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
DOUG LITTLE - Interim Chairman
BOB BURNS
TOM FORESE
BOB STUMP

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY FOR AN EXTENSION OF ITS CERTIFICATE OF CONVENIENCE AND NECESSITY AT CASA GRANDE, PINAL COUNTY, ARIZONA	**DOCKET NO. W-01445A-03-0559**

Surrebuttal Testimony

of

Fredrick K. Schneider

(Hearing on Remand - Phase 2)

TABLE OF CONTENTS

ARIZONA WATER COMPANY

Surrebuttal Testimony of

Fredrick K. Schneider, P. E.

I. **Introduction and Background.**

Q. PLEASE STATE YOUR NAME, EMPLOYER AND OCCUPATION.

A. My name is Fredrick K. Schneider. I am employed by Arizona Water Company as Vice President - Engineering.

Q. ARE YOU THE SAME FREDRICK K. SCHNEIDER WHO PREVIOUSLY PROVIDED TESTIMONY IN THIS DOCKET?

A. Yes.

Q. ARE YOU ADOPTING ALL OF YOUR EARLIER PRE-FILED TESTIMONY?

A. Yes.

Q. HAVE YOU REVIEWED THE REBUTTAL TESTIMONY OF CORNMAN TWEEDY WITNESS FRED E. GOLDMAN (HEARING ON REMAND - PHASE 2)?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR PRE-FILED TESTIMONY?

A. The purpose of my pre-filed testimony is to provide an update on progress made on the Pinal Valley Central Arizona Project ("CAP") Recharge and Recovery Facility, Memorandum of Understanding ("MOU") reached with PERC Water which I discussed in my direct testimony (Hearing on Remand - Phase 2) and provide testimony and evidence in response to the written testimony of Cornman Tweedy witness Fred E. Goldman.

II. **Consolidating the Casa Grande and Coolidge Water Systems into the Pinal Valley Water System.**

Q. **HAS ARIZONA WATER CONNECTED ITS CASA GRANDE AND COOLIDGE WATER SYSTEMS INTO A SINGLE WATER SYSTEM WHICH ARIZONA WATER REFERS TO AS ITS PINAL VALLEY WATER SYSTEM?**

A. Yes. Mr. Goldman's statements to the contrary are incorrect where on page 2, footnote 1 of his rebuttal testimony Mr. Goldman states "However, upon my review of the Master Plan attached as Exhibit FKS-2 and the enlarged portion of the Master Plan attached as Exhibit FKS-3, it does not appear that the interconnection has been completed." Mr. Goldman makes this incorrect statement even though the interconnection of these two water systems has been documented and accepted by the Arizona Corporation Commission ("Commission"), the Arizona Department of Environmental Quality ("ADEQ") and the Arizona Department of Water Resources ("ADWR"). ADEQ issued an approval of construction ("AOC") for the interconnect on January 7, 2008. On October 21, 2010 Arizona Water Company notified ADEQ that effective December 1, 2010, the Coolidge and Casa Grande water systems were consolidated into a single public water system designation, PWSID No. 11-009. The consolidation could occur only if the two water systems were now one single water system. Likewise, upon application by Arizona Water, coupled with evidence of service area consolidation, ADWR established a single service area designation number 56-001307.0001.

Much of Mr. Goldman's rebuttal testimony lacks supporting evidence or is in direct opposition to the facts of this case. Specifically, Mr. Goldman fails to recognize the facts that: (a) Arizona Water has consolidated the Casa Grande and Coolidge water systems in the Pinal Valley water system; (b) Arizona Water has invested over $1.0 million planning for the water needs of its Pinal Valley Water System; (c) Arizona Water has planned for the use of effluent or reclaimed water in its Pinal Valley water system; (d) recharging is not difficult

and is in fact a routine industry practice; and (e) this area is water challenged and reclaimed water resources should be preserved, not thought of as a pain to deal with. In addition, Arizona Water has reduced its groundwater pumping by over 5,000 acre-feet ("AF") over 2014 groundwater use. I provide additional evidence of these facts in my surrebuttal testimony below.

III. Arizona Water's willingness to provide wastewater service to areas where there is a need and no provider for such service.

Q. HAS ARIZONA WATER CHANGED OR WAIVERED ON ITS LONG STANDING POLICY REGARDING PROVIDING WASTEWATER SERVICE?

A. No, it has not. It is and continues to be Arizona Water's policy to provide wastewater service in those areas where it provides water service and where there is no existing wastewater provider already established or certificated and there is a need for such service.

Q. EXPLAIN WHY ARIZONA WATER HAS NOT PROVIDED WASTEWATER SERVICE TO CUSTOMERS IN PINAL VALLEY.

A. Like many parts of the state, there are several qualified wastewater providers already providing wastewater service within Arizona Water's Pinal Valley service area. Specifically, there are three municipal wastewater providers, three commission-regulated wastewater providers and one sanitary district currently providing or poised to provide wastewater service.

Q. HAS ARIZONA WATER EXECUTED AN AGREEMENT WITH PERC WATER CORPORATION TO PARTNER WITH ARIZONA WATER TO PERMIT, DESIGN AND CONSTRUCT WASTEWATER FACILITIES?

A. Yes. On July 25, 2014, Arizona Water Company and PERC Water Corporation ("PERC Water") executed an MOU. The MOU provides among other things, for PERC Water to join Arizona Water to provide sewer/wastewater service to developments where no other

sewer/wastewater provider exists. A copy of the fully executed MOU is attached as Exhibit FKS-11.

Q. DO ARIZONA WATER'S MANAGEMENT AND OPERATORS HAVE EXPERIENCE MANAGING AND OPERATING WASTEWATER FACILITIES?

A. Yes. I explained Arizona Water's qualification and certifications in my direct testimony (Hearing on Remand - Phase 2).

Q. WHAT ELSE HAS ARIZONA WATER DONE TO POSITION IT TO PROVIDE WASTEWATER SERVICE WHEN SUCH SERVICE IS REQUESTED OR NECESSARY?

A. Since 2014, Arizona Water has increased the number of certified wastewater operators it employs by more than 20%.

IV. Arizona Water's Progress in reducing reliance on groundwater in this water-challenged area.

Q. HAS ARIZONA WATER PREPARED A PLAN TO PUT THE UNUSED PORTION OF ITS PINAL VALLEY CENTRAL ARIZONA PROJECT ("CAP") ALLOCATION TO BENEFICIAL USE?

A. Yes. Arizona Water's plan is outlined in the Pinal Valley 2015 CAP Use Plan. A copy of the plan is attached as Exhibit FKS-12 (without appendices). The Pinal Valley 2015 CAP Use Plan was also filed on August 7, 2015 in Arizona Water's Western Group Rate Case Application, Docket No. W-01445A-15-0277.

Q. PLEASE DESCRIBE ARIZONA WATER'S PLANNED PINAL VALLEY RECHARGE AND RECOVERY FACILITY, AS OUTLINED IN THE PINAL VALLEY 2015 CAP USE PLAN.

A. That plan shows that Arizona Water's Pinal Valley recharge and recovery facility consists of recharge basins and the infrastructure necessary to deliver CAP water to these basins.

Arizona Water will eventually drill additional recovery wells on-site to deliver recovered CAP water to customers throughout the Pinal Valley service area. In the meantime, Arizona Water has obtained permits for its existing Pinal Valley wells so that it may recover stored water through them.

Q. WHERE DOES ARIZONA WATER PLAN TO CONSTRUCT THE PINAL VALLEY RECHARGE AND RECOVERY FACILITY?

A. A map showing the location of the Pinal Valley recharge and recovery facility is shown below in Figure 1. A conceptual plan showing the recharge basins and the facility's connection to the CAP canal is shown below in Figure 2.

Figure 1
Pinal Valley Recharge and Recovery Facility Location and Pinal Valley Service Area

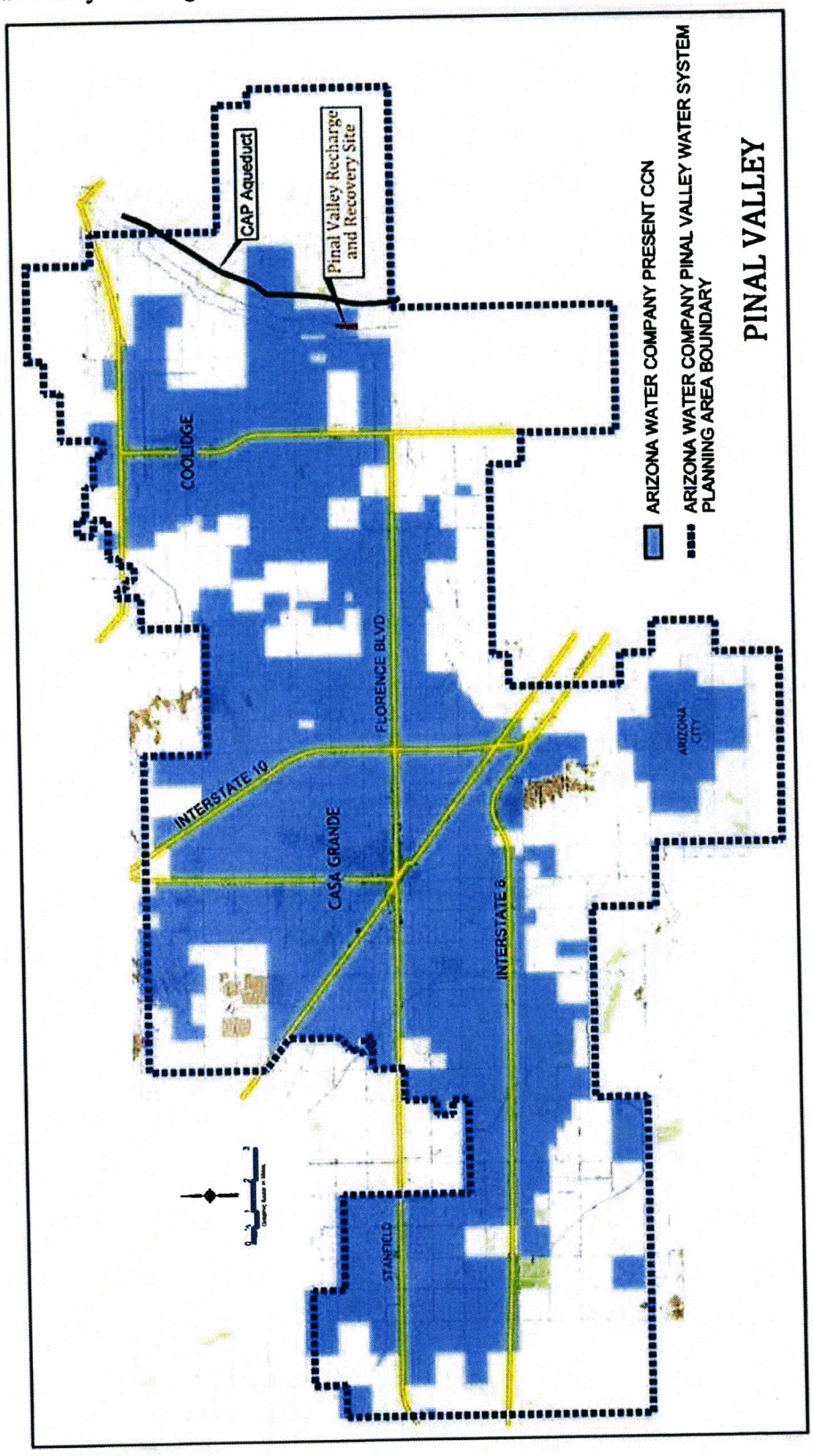

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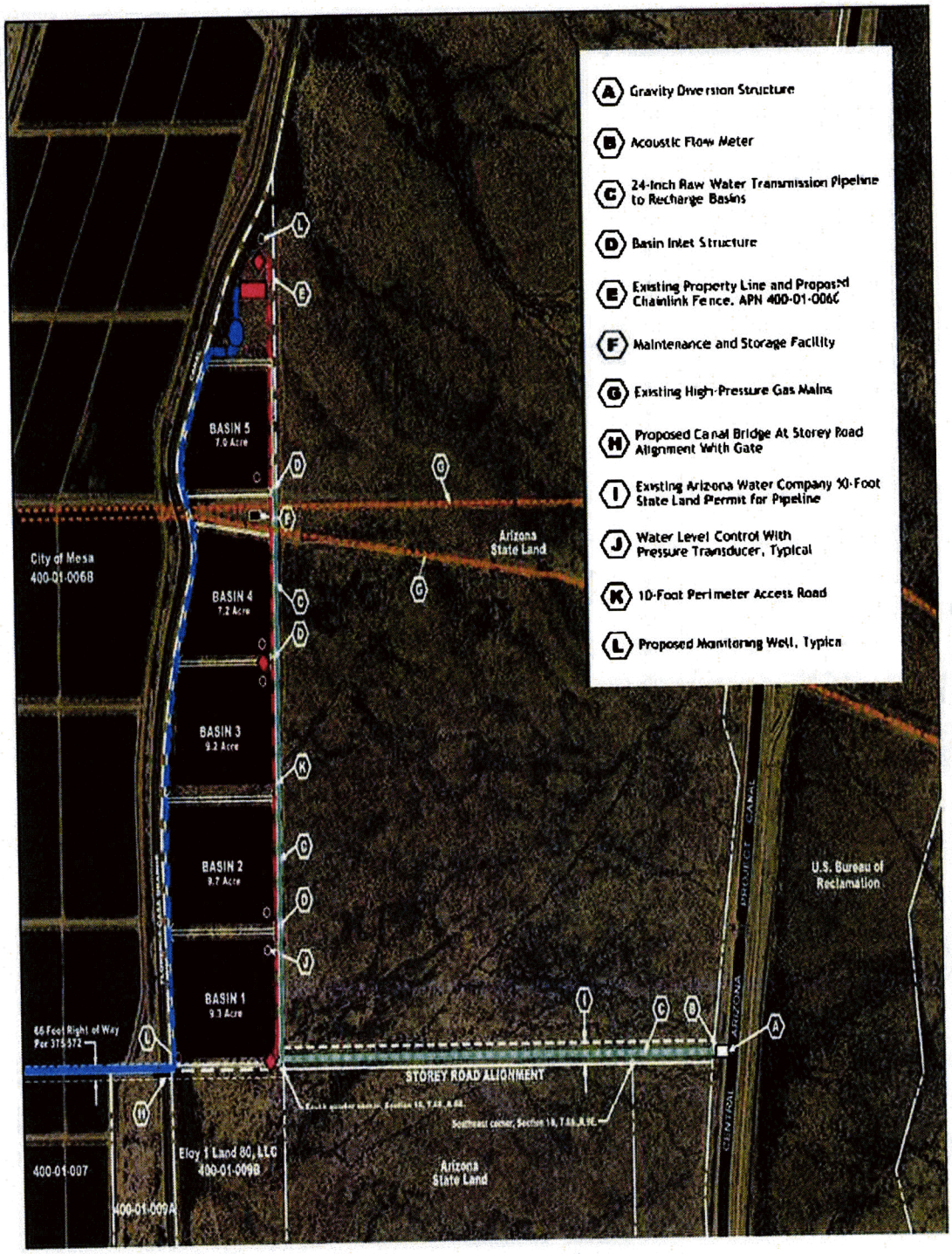
Figure 2
Pinal Valley Recharge and Recovery Facility Conceptual Plan



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Q. WHAT IS RECHARGE AND RECOVERY?

A. Recharge and recovery involves the intentional recharge of water into an aquifer system for intended recovery and beneficial use as an element of long-term water resource management.[1] Under ADWR's recharge and recovery program, water can be stored at either underground storage facilities or groundwater savings facilities. Underground storage facilities are typically constructed using recharge (or spreading) basins where water directly recharges the groundwater aquifer through infiltration. Other methods of underground storage, such as shallow wells (vadose zone) or deep injection wells, are used when recharge basins are impractical or technically not feasible.

Q. HOW MUCH CAP WATER DOES ARIZONA WATER HAVE UNDER SUBCONTRACT WITH THE CAP FOR USE IN THE PINAL VALLEY SERVICE AREA?

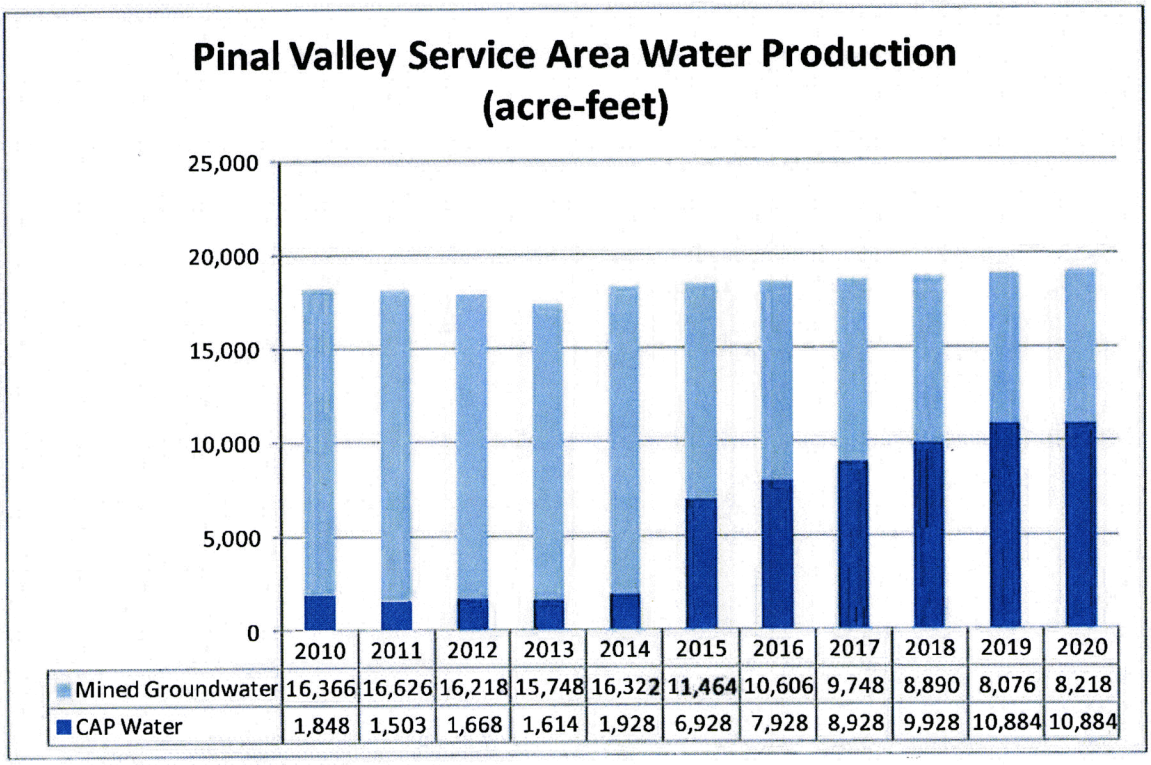
A. Arizona Water holds annual CAP water allocations totaling 10,884 AF in its Pinal Valley service area. Arizona Water delivered over 2,389 AF of CAP water to customers for non-potable use in 2015 and, in 2015, recharged 5,000 AF of CAP water that was recovered from its Pinal Valley service area recovery wells, reducing its groundwater use by 7,389 AF over 2014 groundwater use.

Q. HAVE YOU PROJECTED THE USE OF CAP WATER AND REDUCTION IN GROUNDWATER PUMPING FOR THE PINAL VALLEY SERVICE AREA?

A. Yes. By implementing Arizona Water's 2015 CAP Use Plan, Arizona Water will increase the amount of CAP Water used through recharge and recovery delivered to its customers, thereby reducing the amount of groundwater pumped by 50%, as shown below.

[1] Southwest Hydrology. May/June 2008. University of Arizona.

Figure 3
Pinal Valley Service Area Water Production



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Mined Groundwater	16,366	16,626	16,218	15,748	16,322	11,464	10,606	9,748	8,890	8,076	8,218
CAP Water	1,848	1,503	1,668	1,614	1,928	6,928	7,928	8,928	9,928	10,884	10,884

Q. HOW DOES ARIZONA WATER'S PINAL VALLEY 2015 CAP USE PLAN BETTER MANAGE WATER USE AND COMPLY WITH THE STATE PUBLIC POLICY ON WATER?

A. The Pinal Valley 2015 CAP Use Plan describes Arizona Water's plan to deliver CAP water to its customers through recharge and recovery beginning in 2015. Part of this plan is Arizona Water's recharge and recovery facility located near the CAP canal in Coolidge, Arizona. The estimated construction cost to construct the Pinal Valley recharge and recovery facility is approximately $5.8 million, making it a practical, cost-effective and financially feasible alternative to treatment and direct delivery of CAP water. The City of Coolidge incorporated Arizona Water's Pinal Valley Recharge and Recovery Facility in the water resources section of its 2025 General Plan, which was adopted by the City Council on June 23, 2014.

Q. WHY IS CAP WATER STORAGE AND RECOVERY IMPORTANT TO THIS PROCEEDING?

A. Because Arizona Water's CAP water storage and recovery strategy reduces the overall use of groundwater, recognized by the state authorities as an unsustainable resource, and replaces it with CAP water, a sustainable resource. According to ADWR, increased over-reliance on native groundwater throughout the Pinal Active Management Area ("AMA") threatens the sustainability of groundwater supplies for the Pinal AMA including Arizona Water's Pinal Valley Service Area.[2]

Q. DOES THE STATE OF ARIZONA HAVE A PUBLIC POLICY REQUIRING THE USE OF RENEWABLE WATER RESOURCES INSTEAD OF GROUNDWATER?

A. Yes. Arizona's policy on water storage, water savings and replenishment, as codified in Arizona Revised Statutes Section §45-801.1 states:

> *"The public policy of this state and the general purposes of this chapter are to:*
>
> *1. Protect the general economy and welfare of this state by encouraging the use of renewable water supplies, particularly this state's entitlement to Colorado river water, instead of groundwater through a flexible and effective regulatory program for the underground storage, savings and replenishment of water.*
>
> *2. Allow for the efficient and cost-effective management of water supplies by allowing the use of storage facilities for filtration and distribution of surface water instead of constructing surface water treatment plants and pipeline distribution systems.*

Q. DOES ARIZONA WATER'S PLAN COMPLY WITH ARIZONA'S PUBLIC POLICY?

A. Yes it does.

Q. WHAT EFFECT WILL RECHARGE AND RECOVERY HAVE ON GROUNDWATER PUMPING UNDER THE PINAL VALLEY 2015 CAP USE PLAN?

[2] Arizona Department of Water Resources, *Draft Demand and Supply Assessment, 1985-2025 Pinal Active Management Area*

A. Implementing the Pinal Valley 2015 CAP Use Plan increases the amount of CAP water being put to beneficial use through recharge and recovery of CAP Water delivered to customers, ultimately reducing the amount of mined groundwater Arizona Water pumps by 50% or a total reduction of nearly 11,000 AF annually.

Q. DOES ARIZONA WATER'S 2015 CAP USE PLAN CONSERVE AND PROTECT GROUNDWATER SUPPLIES IN THIS WATER-CHALLENGED AREA?

A. Yes, it does. Arizona Water plan is in compliance with Arizona's Groundwater Management Act as codified in A.R.S. §45-401(B) which states:

> *"It is therefore declared to be the public policy of this state that in the interest of protecting and stabilizing the general economy and welfare of this state and its citizens it is necessary to conserve, protect and allocate the use of groundwater resources of the state and to provide a frame work for the comprehensive management and regulation of the withdrawal, transportation, use, conservation and conveyance of rights to use the groundwater in this state."*

Q. WHAT IS THE STATUS OF ARIZONA WATER'S PINAL VALLEY RECHARGE AND RECOVERY FACILITY WHICH WILL STORE CAP WATER AND REDUCE RELIANCE ON GROUNDWATER, AN UNSUSTAINABLE RESOURCE, IN THE WATER-CHALLENGED AREA AT ISSUE IN THIS PROCEEDING?

A. Arizona Water has completed 30% design plans, applied for and received the Underground Storage Facility permit (Permit No. 71-224242.0000) and Water Storage permit from ADWR (Permit No. 73-224242.0000). Arizona Water is now working to complete the final design for the Pinal Valley Recharge and Recovery Facility. Arizona Water anticipates storing CAP water at its Central Arizona Project water recharge and recovery project in 2016. A copy of the above letter and permits are attached as Exhibit FKS-13. Again, this is contrary to Mr. Goldman's rebuttal testimony and the facts in this case.

Q. HAS ARIZONA WATER TAKEN ANY OTHER STEPS TO IMPROVE ITS MANAGEMENT OF WATER USE IN ITS PINAL VALLEY WATER SYSTEM?

A. As I mentioned earlier, Arizona Water has worked with ADWR to successfully permit 39 of its Pinal Valley wells as recovery wells (Permit No. 74-224234.0000). This ADWR permit allows Arizona Water to recover stored CAP Water, recover stored reclaimed water or other water which may be stored in the Pinal AMA. Like Arizona Water, the Arizona Water Banking Authority ("AWBA") and the Central Arizona Water Conservation District ("CAWCD") plan to recover stored CAP and Colorado River water by using recovery wells.

Q. WHAT ELSE HAS ARIZONA WATER DONE TO PRESERVE AND ADD TO LOCAL WATER SUPPLIES?

A. As an interim step, Arizona Water is already storing CAP water through irrigation and drainage districts located in its Pinal Valley service area. On August 22, 2014, Arizona Water received the necessary ADWR Water Storage permits to store CAP Water at three Groundwater Savings Facilities in the Pinal Valley Active Management Area. Those permit numbers are shown below.

Groundwater Savings Facility	ADWR Water Storage Permit Number
CAIDD	73-531382.0700
MSIDD	73-531381.0700
HIDD	73-534489.0800

In addition, reduce the cost impact on customers, Arizona Water applied for and received $357,500 in grants from ADWR's Water Management Assistance Program to store CAP water in 2015.

Q. WHAT ADDITIONAL STEPS HAS ARIZONA WATER TAKEN TO REDUCE GROUNDWATER PUMPING BEYOND 2015?

A. For 2016, Arizona Water ordered 6,000 AF of CAP water and is in the process of storing that water in the three Groundwater Savings Facilities listed above. Arizona Water is continuing to deliver CAP water to customers for non-potable uses and expects to deliver more than 2,300 AF to customers in 2016.

V. **Arizona Water has invested over $1.0 Million Planning for Pinal Valley's Water needs.**

Q. HAS ARIZONA WATER INVESTED A SIGNIFICANT AMOUNT OF TIME AND EFFORT TO PLAN FOR THE WATER NEEDS OF ITS PINAL VALLEY WATER SYSTEM AND PLANNING AREA?

A. Yes. Contrary to Mr. Goldman's statements, Arizona Water has invested a significant amount of time, effort and money into planning for the water needs in its Pinal Valley Water System and Planning Area. In reviewing timecards and invoices, Arizona Water's efforts through December 31, 2015 total thousands of man-hours and over $1.0 million of investment.

Q. IS MR. GOLDMAN'S REBUTTAL TESTIMONY ON PAGE 4 LINES 5 AND 6 CORRECT WHERE, MR. GOLDMAN SAYS "I DON'T SEE THAT AWC HAS DONE ANYTHING TO PLAN FOR THE DELIVERY OF EFFLUENT IN ITS PINAL VALLEY PLANNING AREA".

A. No, that is incorrect. Mr. Goldman's statements are not supported by facts. In my Direct testimony on Remand - Phase 2, I included two detailed reports which I referred to as Exhibit 8 and Exhibit 9. These two important reclaimed water planning documents detail Arizona Water's plan to use reclaimed water and shows Arizona Water's planning efforts. These two reports total nearly 90 pages and took thousands of hours of effort and more than $100,000 to develop and compile.

VI. **Developers view reclaimed water, or effluent, as problematic to deal with.**

Q. FROM YOUR EXPERIENCE, HOW DO DEVELOPERS VIEW RECLAIMED WATER OR EFFLUENT?

A. From my 25 plus years of experience, developers typically see effluent as Mr. Goldman does, a pain to deal with. That is why developers prefer to create uses for effluent through the creation of golf courses and ornamental lakes. Mr. Goldman admits this on page 10, lines

17-19 of his rebuttal testimony when Mr. Goldman says "Given that the Cornman Tweedy property will not have a golf course or ornamental lakes when it is ultimately developed, the reuse options are limited."

In fact, Robson's use of mined groundwater where it could offset its mined groundwater use with recharged effluent shows Robson's mismanagement of water resources in a water-challenged area. Mr. Garfield also discussed in his surrebuttal testimony Robson's use of credits only to reduce costs, which is neither in the best interest of its utility customers nor in the best interest of a water-challenged area.

Arizona Water prefers to fulfill state water policy planning objectives by recharging available water supplies for future recovery and beneficial use by its water systems customers.

Q. WHAT VALUE DOES MR. GOLDMAN AND ROBSON PLACE ON RECLAIMED WATER?

A. Mr. Goldman and Robson place little value on reclaimed water. This fact is supported by Mr. Goldman's rebuttal testimony where on page 4, lines 18-19 where Mr. Goldman states "For example, an integrated utility may reduce the price of its effluent in order to find buyers for that effluent." An integrated utility, like the integrated utility Robson purports is superior, believes effluent or reclaimed water is of little value.

Q. IS RECHARGING RECLAIMED WASTEWATER MORE DIFFICULT THAN RECHARGING UNTREATED CAP WATER?

A. No. Recharging reclaimed water is a routine industry standard practice. However, Mr. Goldman would like the commission to believe "Recharge of effluent is complicated and expensive, and it requires a significant amount of maintenance." (*See* page 10, lines 20-21.) In fact, recharging reclaimed water is so common and the resource so valuable that Liberty Utilities and the CAWCD executed a 100-year agreement in February 2014 to construct and

manage a recharge facility to store reclaimed water. A copy of the agreement is attached as Exhibit FKS-14. As I testified above, Arizona Water plans to recharge, store and recover reclaimed water in its Pinal Valley Planning Area of which the Cornman Tweedy property is a part.

Q. WHAT IS THE STATUS OF USING RECLAIMED WATER FROM THE CITY OF CASA GRANDE ("CITY") OR GLOBAL WATER?

A. Arizona Water and the City are working to develop an MOU that governs the use of reclaimed water. As recently as December 22, 2015, the two met as that process continues. Based on efforts made to date with the City, we expect to execute the MOU this year.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

FIGURES

EXHIBITS

FKS-11	Memorandum of Understanding between Arizona Water Company and PERC Water dated July 25, 2014
FKS-12	Pinal Valley 2015 CAP Use Plan
FKS-13	ADWR's Decision of the Director to Grant Underground Storage Facility ("USF") Permit No. 71-224242.0000 and Water Storage Permit No. 73-224242.0000 to Arizona Water Company
FKS-14	Agreement between Liberty Water and the Central Arizona Water Conservation District, dated February 2014

EXHIBIT FKS-11

MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM OF UNDERSTANDING ("MOU") is made and entered into as of the 25th day of July, 2014, by and between ARIZONA WATER COMPANY, an Arizona corporation ("Arizona Water") and PERC WATER CORPORATION, a California corporation ("PERC").

RECITALS

A. Arizona Water is a public service corporation that owns and operates water systems and provides water service in various cities, towns, and communities located in eight counties in Arizona under and subject to the jurisdiction of the Arizona Corporation Commission (the "Commission"). Arizona Water also anticipates providing sewer/wastewater service to future developments in portions of its service areas where no other sewer/wastewater service provider is available to provide such service, including but not limited to the areas shown on Attachment A, hereto.

B. PERC designs, builds, and operates sewer/wastewater treatment facilities in Arizona and California.

C. The parties are interested in a cooperative arrangement whereby Arizona Water may invite PERC to assist Arizona Water in providing sewer/wastewater service to developments or identified regions in Arizona Water's existing service areas or additions to those existing service areas.

TERMS OF UNDERSTANDING

In consideration of the mutual understandings, covenants, promises, representations, and agreements contained in this MOU and other good and valuable consideration, the parties hereto agree as follows:

1. Cooperation. Arizona Water and PERC intend to cooperate as follows:

a. Arizona Water plans to provide water service to developments within its existing service areas and to additions to its existing service areas and to invite PERC to join with Arizona Water to provide sewer/wastewater service to such developments where no other sewer/wastewater service provider is available to provide such service.

b. Arizona Water will notify PERC of the opportunity to join with Arizona Water to provide sewer/wastewater service in a development or identified region within Arizona Water's service area or an intended addition to Arizona Water's existing service area.

c. PERC may accept or respond by meeting and conferring with Arizona Water representatives about the particular details and requirements for providing such sewer/wastewater service.

d. The parties will cooperate fully in connection with planning their respective services to such developments or regions, including, if necessary, to support Arizona Water's efforts to obtain Commission approval for it to provide such services and, if necessary, such additional service areas.

e. Any agreement between the parties to provide sewer/wastewater service in Arizona Water's service areas will provide mutually acceptable terms and conditions for PERC to deliver all or part of the effluent or reclaimed water PERC produces to Arizona Water for direct or indirect beneficial use by its customers.

2. Non-Disclosure.

a. Except as the parties otherwise agree, neither party will disclose any of the information disclosed, shared, provided by, or obtained from the other party, because any such disclosure will prejudice such other party's ability to successfully conduct its business, and because any such disclosure will cause irreparable harm. Exceptions to the foregoing include information which:

- at the time of disclosure was readily available to the public;
- becomes readily available to the public, other than through a breach of this MOU;
- either party can establish was in its possession prior to the date of disclosure of such information; or
- is required to be disclosed to the Commission in connection with a proceeding in which Arizona Water or PERC are parties, or in accordance with the order or decree of the Commission or a court of competent jurisdiction or by applicable law or regulation, provided that both parties agree to give each other thirty (30) days advance written notice prior to disclosure in order that the affected party may seek a protective order or other appropriate relief.

b. Each party understands that the parties' joint or cooperative disclosure of such information in connection with the developments referred to in section 1 above, or a disclosure with the written consent of the parties, will not violate the terms of this section.

3. Time is of the Essence. Arizona Water and PERC agree that time is of the essence and that each will diligently perform its commitments hereunder in a timely fashion.

4. Notice Provisions. All notices pursuant to this MOU shall be in writing and sent by first class mail or by courier (such as Federal Express) or by hand delivery addressed as follows:

To Arizona Water:
Arizona Water Company
3805 N. Black Canyon Highway
Phoenix, Arizona 85015-5351
Attention: President

or

Post Office Box 29006
Phoenix, Arizona 85038-9006
Attention: President

To PERC:

PERC Water Corporation
959 South Coast Drive, Suite 315
Costa Mesa, CA 92626
Attention: President

or to such other address or addresses as either party may designate by written notice to the other party. Notices shall be deemed given, received, and effective on the date of delivery, if hand delivered or delivered by courier, or two business days after deposit in the U.S. Mail, postage prepaid, with proof of mailing from the U.S. Postal Service.

5. Execution in Counterparts. This MOU may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument.

6. Succession. This MOU shall inure to the benefit of the successors and assigns of the parties hereto. Any assignment requires the non-assigning party's prior written approval, which shall not be unreasonably withheld. As a condition precedent to the non-assigning party's approval of any assignment, the assignee must be acceptable to the non-assigning party and satisfy the non-assigning party of the assignee's ability to fully perform hereunder. Any assignee must assume all obligations of the assigning party hereunder and, upon the non-assigning party's written approval, the assigning party shall be released from any further obligation hereunder.

7. Complete Agreement. This instrument contains the entire understanding between the parties with respect to the subject matter contained herein and no amendment or modification shall be binding unless made in writing and signed by duly authorized representatives of the parties hereto.

8. Headings. Headings on each paragraph or subparagraph are merely for convenience and shall under no circumstances be used to interpret or construe this MOU.

9. Duration. This MOU shall remain in effect until terminated by either of the parties hereto, or two years from the date of this MOU, whichever occurs first.

10. Attorney's Fees. In the event any claim, controversy, or legal action arises out of this MOU, the prevailing party shall be entitled to recover from the other party all costs, expenses, and fees incurred therein by said prevailing party (including such attorney's fees and costs as shall be fixed by the court).

11. Forum Selection and Choice of Law. Any action or suit arising out of or relating to this MOU shall take place in a court of competent jurisdiction in Maricopa County, Arizona. Arizona law shall govern this MOU without regard to the choice of law provisions thereof.

12. Further Instruments. Arizona Water and PERC agree that they shall execute any further instruments and perform any further acts which are or may become reasonably necessary to carry out the terms of this MOU.

13. Waiver. No waiver hereunder, expressed or implied, shall imply any other waiver, at the same or subsequent time, whether of the same obligation or of any other obligation. No waiver hereunder shall be deemed effective unless expressly set forth in writing.

14. Drafter. Both parties have drafted this MOU and this MOU shall not be construed against either party as the drafter thereof.

IN WITNESS WHEREOF, each of the parties hereto has caused this instrument to be executed by their respective officers theretofore duly authorized as of the date first written above.

ARIZONA WATER COMPANY,
an Arizona corporation

By: William M Garfield

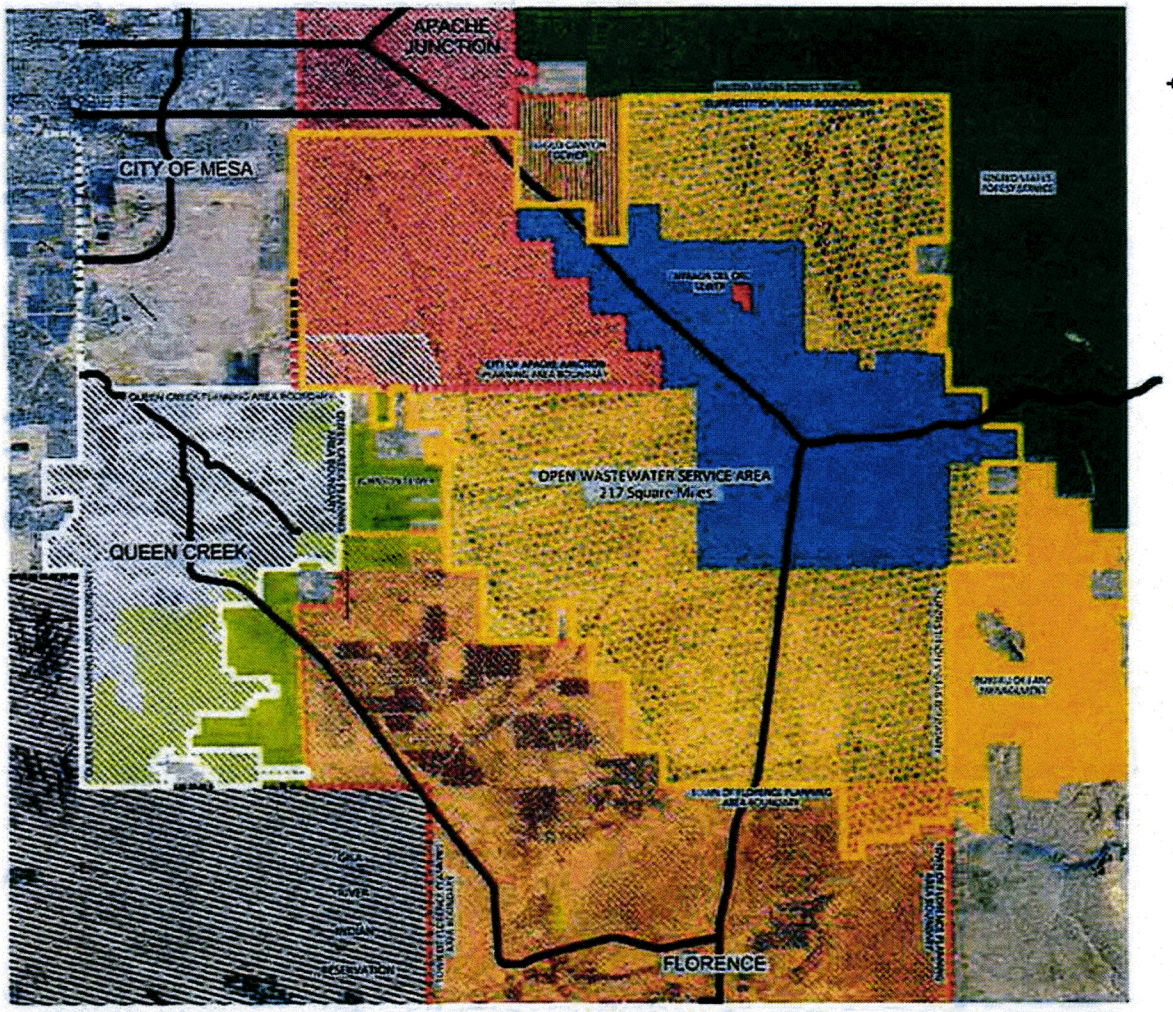
Its: President and COO

PERC WATER CORPORATION,
a California corporation

By: _____

Its: President

Attachment A
1 of 2



Superstition Vistas

SUPERSTITION VISTAS LEGEND

- Superstition Vistas Study Area
- Arizona Water Company CCN within the Superstition Vista Study Area
- Bureau of Land Management
- United States Forest Service
- Entrada Del Oro Sewer
- Johnson Sewer
- Gold Canyon Sewer (Liberty)
- City of Apache Junction Planning Area
- Town of Florence Planning Area
- City of Queen Creek Planning Area
- Gila River Indian Community

Attachment A
2 of 2

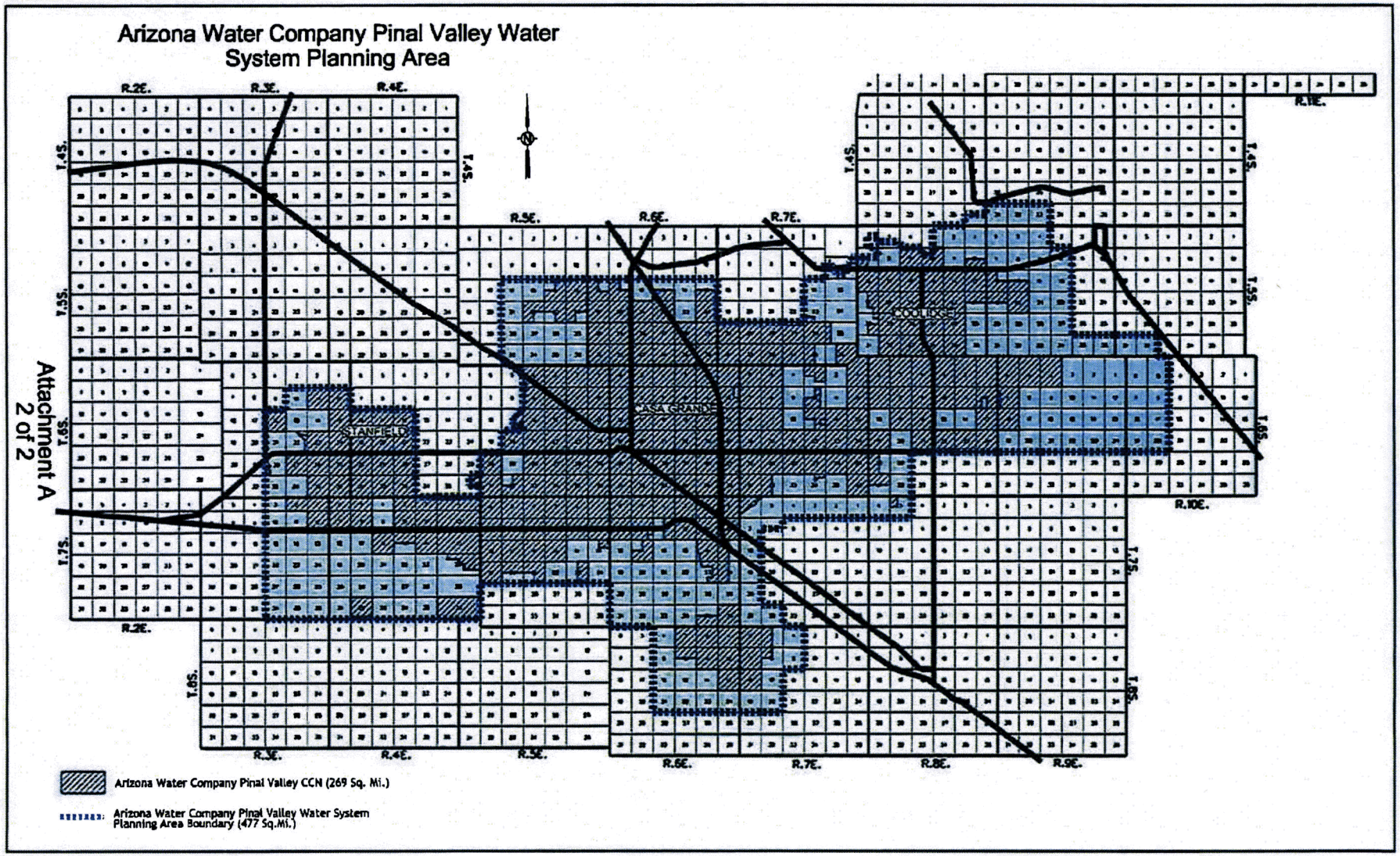


EXHIBIT FKS-12

Arizona Water Company

Pinal Valley
Central Arizona Project
Water Use Plan

2015 Update

August 7, 2015

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1. Introduction

In this 2015 Central Arizona Project ("CAP") Water Use Plan ("2015 CAP Use Plan"), Arizona Water Company ("Arizona Water") presents its plan to deliver CAP water to its customers through underground storage and recovery beginning in 2015. The estimated construction cost of Arizona Water's underground storage and recovery project is $5.8 million making it a practical, cost-effective and financially feasible alternative to surface water treatment and direct delivery of CAP water which would cost $94 million.

Arizona Water's earlier 2006 CAP Use Plan (filed with the Arizona Corporation Commission pursuant to Decision No. 68302 on December 29, 2006), called for Arizona Water to design and construct a 10 million gallon per day ("MGD") surface water treatment plant at an estimated cost (in 2006 dollars) ranging from $34 million to $66 million to deliver treated CAP water directly to customers in its Pinal Valley (i.e., Casa Grande and Coolidge) service area. In 2014, after further refinements to design specifications and a general increase in equipment, materials, and construction costs, that cost estimate grew by more than 40% to $94 million. As a result, Arizona Water developed a far less costly and more efficient means of delivering much needed CAP water to Arizona Water's Pinal Valley customers than by constructing a costly and labor intensive surface water treatment plant.

Arizona Water's plan to use CAP water to serve its customers through recharge and recovery coincides with the State of Arizona's public policy directives on water storage and water savings. More specifically, Arizona's policy on water storage, water savings and replenishment, as codified in Arizona Revised Statutes ("A.R.S.") Section §45-801.01 states:

> *The public policy of this state and the general purposes of this chapter are to:*
>
> *1. Protect the general economy and welfare of this state by encouraging the use of renewable water supplies, particularly this state's entitlement to Colorado river water, instead of groundwater through a flexible and effective regulatory program for the underground storage, savings and replenishment of water.*
>
> *2. Allow for the efficient and cost-effective management of water supplies by allowing the use of storage facilities for filtration and distribution of surface water instead of constructing surface water treatment plants and pipeline distribution systems.*

Arizona Water's use of CAP water through groundwater recharge, storage, and recovery, as described in this 2015 CAP Use Plan, complies with and advances this crucial public policy by using Colorado River water delivered by CAP. Arizona Water's plan also advances this policy by efficiently and cost-effectively managing water supplies through the use of underground storage facilities and recovery wells, instead of constructing a very costly and labor intensive surface water treatment plant.

This 2015 CAP Use Plan provides an overview of water supplies and demands in the Pinal Active Management Area ("AMA"), both historical and projected, which also shows the state's over-reliance on over drafting native groundwater, i.e., pumping groundwater faster than it is replaced naturally. According to the Arizona Department of Water Resources ("ADWR"),

increased over-reliance on native groundwater throughout the Pinal AMA threatens the sustainability of groundwater supplies for the Pinal AMA including Arizona Water's Pinal Valley service area.[1] As a result, there is a demonstrated need to maximize the beneficial use of renewable water supplies such as CAP water as soon as practicable. Recharging CAP water at an underground storage facility, besides being an efficient and cost-effective way to manage Arizona Water's CAP water allocations, is consistent with the policies and recommendations of ADWR, CAP, and the Arizona Water Banking Authority ("AWBA") in the studies and reports listed below.

Furthermore, Arizona Water's use of CAP water as described in this 2015 CAP Use Plan conserves and protects groundwater in compliance with Arizona's 1980 Groundwater Management Act as codified in A.R.S. §45-401(B) which states:

> *"It is therefore declared to be the public policy of this state that in the interest of protecting and stabilizing the general economy and welfare of this state and its citizens it is necessary to conserve, protect and allocate the use of groundwater resources of the state and to provide a frame work for the comprehensive management and regulation of the withdrawal, transportation, use, conservation and conveyance of rights to use the groundwater in this state."*

In addition, Arizona Water's use of CAP water as discussed in this 2015 CAP Use Plan furthers the Pinal AMA management goal by reducing the amount of groundwater pumped by nearly 80,000 acre-feet over the next ten years, thereby preserving those supplies for future non-irrigation uses. Recharging CAP water in underground storage and groundwater savings facilities also protects against shortages when deliveries of CAP from the Colorado River are cut back or curtailed.

The City of Coolidge incorporated Arizona Water's Pinal Valley Recharge and Recovery Facility in the water resources section of its 2025 General Plan, which was adopted by the City Council on June 23, 2014. Coolidge voters approved the City's 2014 General Plan in a general election held on November 4, 2014.[2]

2. Underground Storage and Recovery

2.1. Background

In the 1980s, Arizona's need to replenish its dwindling groundwater aquifers, coupled with the availability of surface water supplies, led to development of an active groundwater storage and recovery program. Since that time, storage and recovery (also known as recharge and recovery) has emerged as one of the most important and effective water management tools for the state, particularly in meeting Arizona's policy goals of protecting the general economy and welfare of the state by using renewable supplies, such as CAP water,

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[1] Arizona Department of Water Resources, *Draft Demand and Supply Assessment, 1985 – 2025 Pinal Active Management Area*

[2] *See* Appendix A-1, Copy of Water Resources Element of City of Coolidge 2025 General Plan

instead of relying on over drafted groundwater.[3] As further evidence of the benefits of storing CAP water underground, ADWR's demand and supply assessment for the Pinal AMA identified replenishment of groundwater with surface water such as CAP water (or treated wastewater effluent), as a flexible, cost-effective approach to making beneficial use of these much-needed renewable water supplies. [4]

ADWR is the state agency that administers Arizona's storage and recovery program and has primary responsibility for enforcing laws and regulations governing storage and recovery through a system of permits and reporting requirements. ADWR also maintains records of all storage facilities and tracks the amount of water stored by each permit holder in separate water storage accounts for each such permit holder. No entity may store water underground without an ADWR issued water storage permit. In addition, entities storing water may not physically recover such water without an ADWR issued recovery well permit. Storing water underground accrues annual or long-term storage credits depending on the eligibility of the entity storing water and the timing of recovery.

Under ADWR's recharge and recovery program, permit holders can store water at either underground storage facilities or groundwater savings facilities. Typically, underground storage facilities are designed and constructed to use recharge (or spreading) basins where water percolates and directly recharges the groundwater aquifer through infiltration. Other types of underground storage facilities, such as shallow wells (vadose zone) or deep injection wells, are used when recharge basins are impractical or technically not feasible. In the alternative, groundwater savings facilities are used for "indirect" recharge, and are operated by agricultural irrigation districts that normally pump groundwater. These groundwater savings facility operators have facilities in place to receive deliveries of CAP water in lieu of the agricultural irrigation districts having to pump groundwater, thereby saving groundwater and creating groundwater storage credits equal to the quantity of CAP water delivered to the irrigation district. As a result, the groundwater aquifer is recharged indirectly by saving groundwater (hence, the term *groundwater savings facilities*).

2.2. Arizona Water's Pinal Valley Recharge and Recovery Facility

Arizona Water holds CAP water allocations totaling 10,884 acre-feet per year in its Pinal Valley service area. Arizona Water delivered 1,928 acre-feet of CAP water to provide water service to customers for direct non-potable uses in 2014.

In order to put its full CAP allocations to use for water service to customers, Arizona Water plans to construct its Pinal Valley Recharge and Recovery Facility in the eastern part of its Pinal Valley service area. A map showing the location of the Pinal Valley Recharge and Recovery Facility is included as Figure 2-1, and a conceptual plan showing the recharge basins and connection to the CAP aqueduct is shown in Figure 2-2.

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[3] *See* A.R.S. §45-801.01 1-2

[4] Arizona Department of Water Resources, *Draft Demand and Supply Assessment, 1985 – 2025 Pinal Active Management Area*, 7.

Figure 2-1 Pinal Valley Service Area and Pinal Valley Recharge and Recovery Facility Location

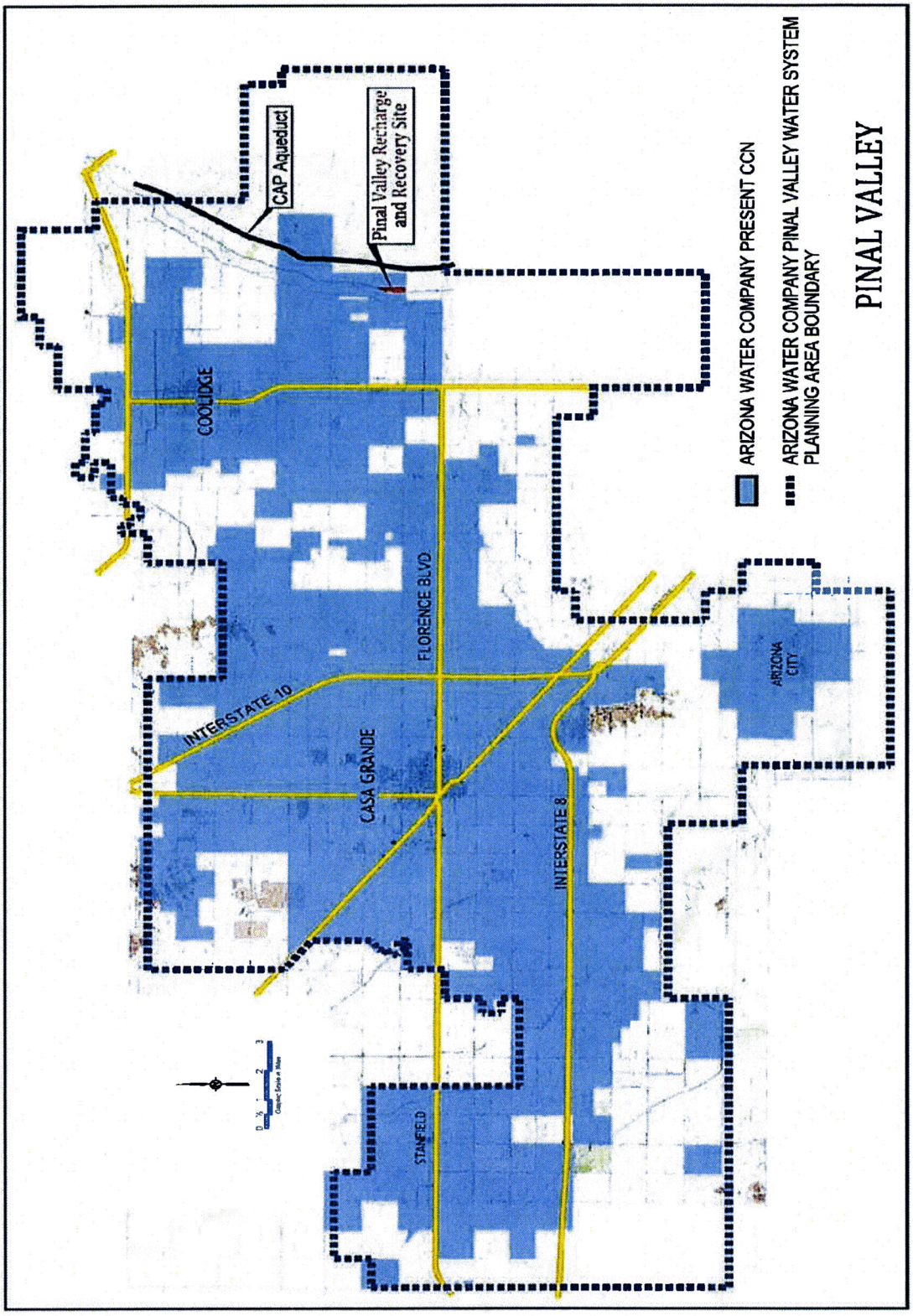
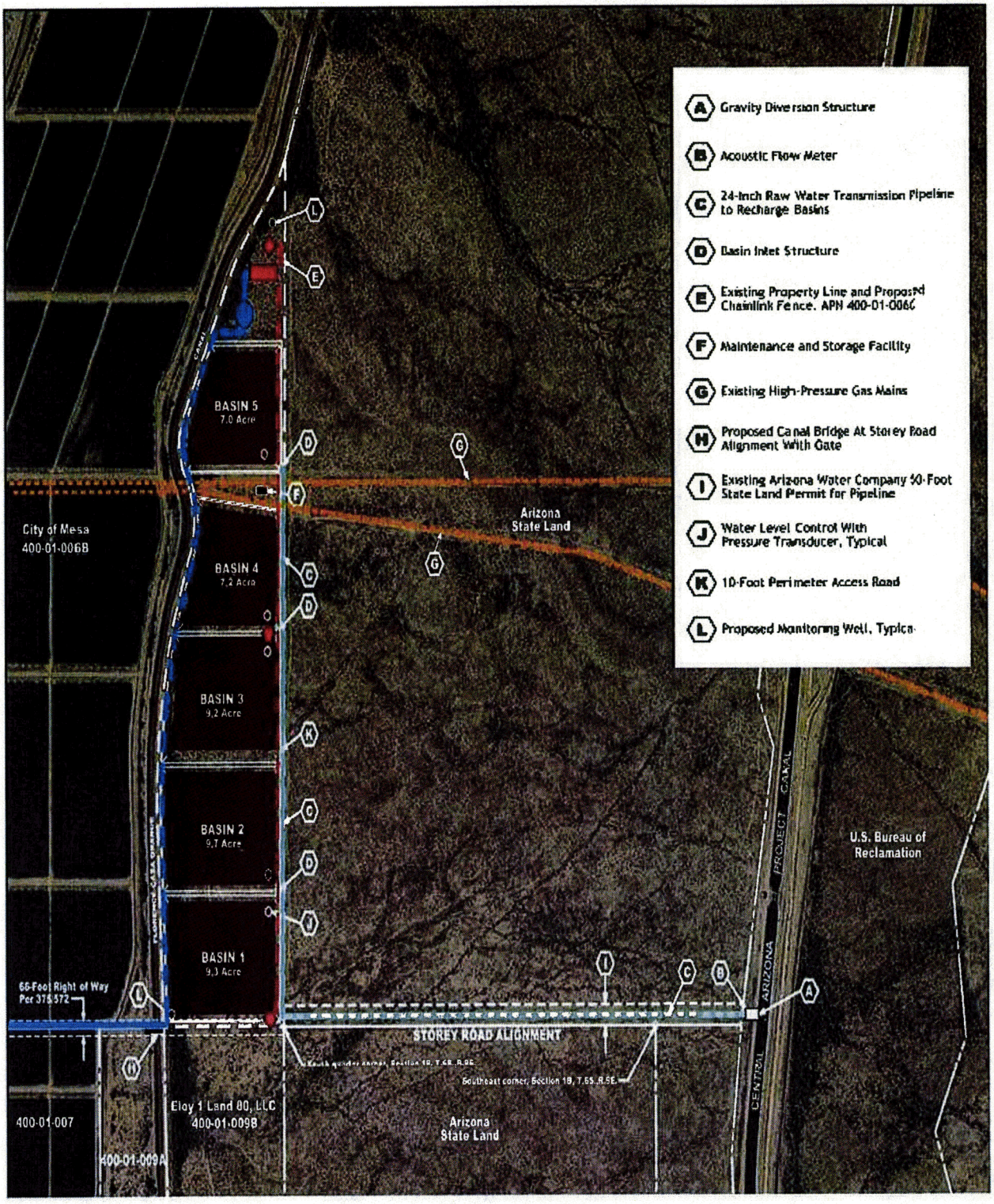


Figure 2-2 Pinal Valley Recharge and Recovery Facility Conceptual Plan



A hydrogeologic study completed for Arizona Water shows that its recharge and recovery site is capable of recharging CAP water at a rate of one foot per day through the use of the planned spreading basins.[5] Based on this recharge rate, the hydrogeologic study estimates that the facility will be capable of recharging Arizona Water's full 10,884 acre-feet CAP allocation with 30 acres of recharge basins.

For purposes of this 2015 CAP Use Plan, Arizona Water has used 12,000 acre-feet per year as the full build out capacity of this facility to account for 2-3 months when each recharge basin is not used because of necessary maintenance. Regular maintenance of the Pinal Valley Recharge and Recovery Facility includes sediment removal and scarification (i.e., tilling the basin surface to prevent clogging), repair and adjustment of monitoring wells, and calibration and repair of water meters and other appurtenances.

Untreated CAP water will flow by gravity from a turnout or siphon constructed at the CAP aqueduct to the Pinal Valley Recharge and Recovery Facility through 3,000 lineal feet of 24-inch water transmission main. ADWR requires two monitoring wells near the recharge basins as part of the required water storage permit to measure the level of groundwater mounding caused by percolating CAP water. Due to the high quality of CAP water, Arizona Water will not need to treat the water prior to recharge in the Pinal Valley Recharge and Recovery Facility spreading basins. A detailed description of the Pinal Valley Recharge and Recovery Facility is included in the hydrogeologic study attached hereto as Appendix A-2.

2.3. Recovery of Stored CAP Water

Arizona Water will initially recover stored CAP water from any of its 39 existing wells located throughout its Pinal Valley service area pursuant to recovery well permits issued by ADWR. As the area near the Pinal Valley Recharge and Recovery Facility develops, Arizona Water will recover stored CAP water from recovery wells constructed at the recharge site and deliver it to the Pinal Valley service area distribution system through a 36-inch water transmission main. Arizona Water will construct on-site recovery wells as needed to satisfy water system production needs and to meet its needs for recovery of stored CAP water as shown in Figure 2-3 below.

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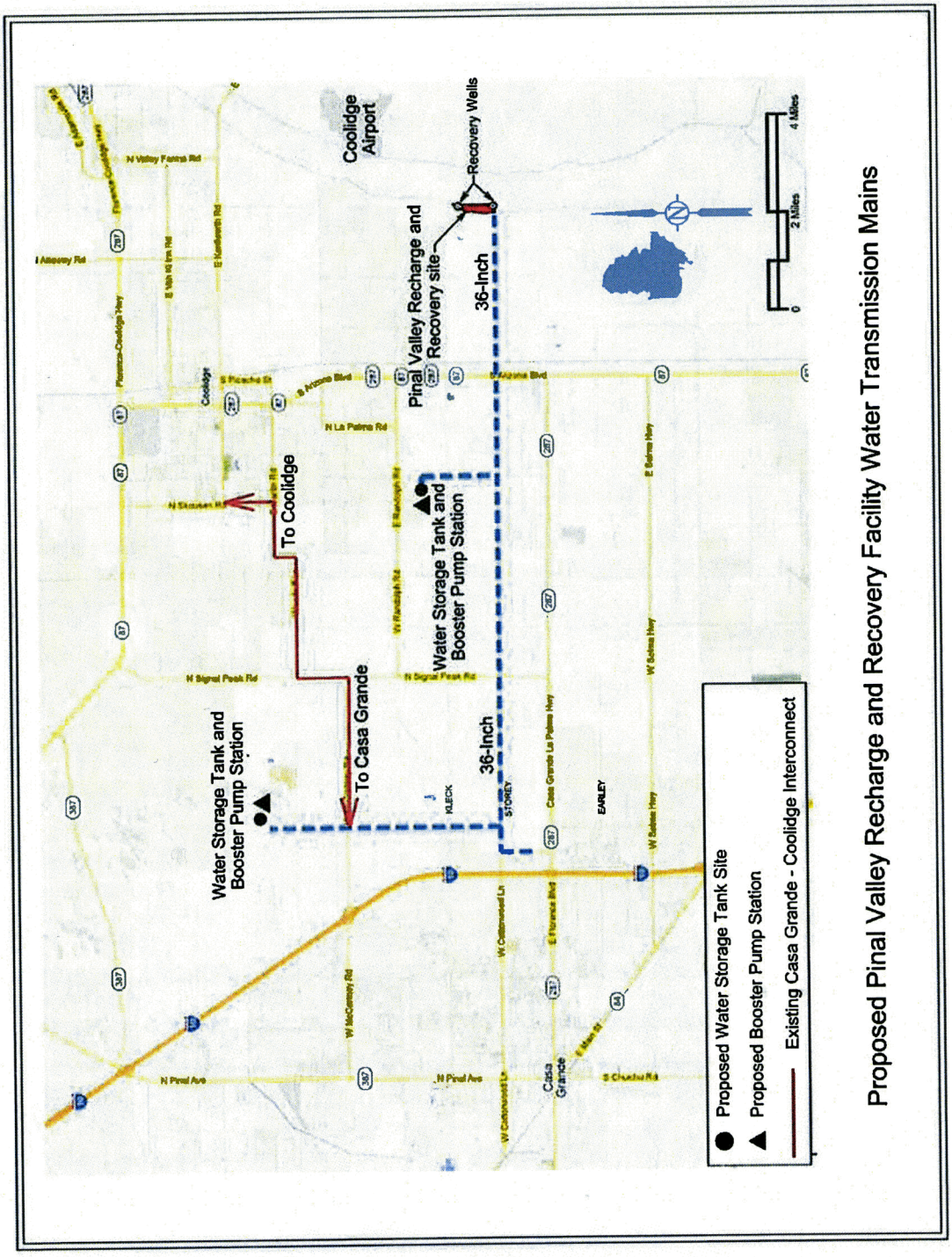
[5] *See* Appendix A-2 Hydrogeologic Study Arizona Water Company, December 18, 2014, Page 9

Figure 2-3 Pinal Valley Recharge and Recovery Facility Water Transmission Mains and Onsite Recovery Wells



2.4. Pinal Valley Recharge and Recovery Facility – Cost Estimate

Arizona Water obtained an Engineer's Opinion of Probable Construction Cost for each phase of this facility (Appendix A-3), which shows a cost of $5.8 million for the Pinal Valley Recharge and Recovery Facility at full build out.[6] The estimate includes costs to construct 3,000 lineal feet of 24-inch water transmission main and related infrastructure required to deliver water from the CAP aqueduct to the Pinal Valley Recharge and Recovery Facility's recharge basins. A schedule showing both the cost and recharge capacity for each phase is shown in Table 2-1 below.

Table 2-1 Pinal Valley Recharge and Recovery Facility Cost Estimate by Phase

Basin Number Or Phase	Year	Basin Area (Acres)	Basin (Facility) Recharge Capacity (AF per year)		Construction Cost
1	2016	9.3	2,650	(2,650)	$2,743,000
2	2017	9.7	2,750	(5,400)	$731,000
3	2018	9.2	2,600	(8,000)	$747,000
4	2019	7.2	2,000	(10,000)	$763,000
5	2020	7.0	2,000	(12,000)	$779,000
Total					$5,763,000

Note 1: Facility Recharge Capacity reflects 2-3 months when recharge basins are not used because of necessary maintenance.
Note 2: Additional CAP water, recycled water or other renewable supplies may be available for recharge at this facility.

The Engineer's Opinion of Probable Operations and Maintenance ("O&M") costs for the Pinal Valley Recharge and Recovery Facility is $64,180 per year at full build out.[7] The O&M cost estimate for Phase One of the Pinal Valley Recharge and Recovery Facility is based on the assumption that the first recharge basin will be placed into service in late 2016. Arizona Water will further develop and refine these O&M cost estimates as it gains experience operating and maintaining Phase One of the Pinal Valley Recharge and Recovery Facility, and from conducting a pilot recharge program in 2015.

Arizona Water plans to fund the construction of the Pinal Valley Recharge and Recovery Facility primarily with off-site facilities fees. Also, Arizona Water will seek federal and state grants, and if necessary, will use company funds. Arizona Water plans to construct the Pinal Valley Recharge and Recovery Facility in phases to match construction costs with collection of off-site facilities fees and awards of federal and state grants. Arizona Water projects that by 2016 it will collect off-site facilities fees sufficient to construct Phase One of the Pinal Valley Recharge and Recovery Facility, estimated to cost $2.7 million. Arizona Water expects to construct all phases of the Pinal Valley Recharge and Recovery Facility by 2020. Table 2-2 shows the phasing of the Pinal Valley Recharge and Recovery Facility and the projected amount of off-site facilities fees available to construct this facility.

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[6] *See* Appendix A-3 Engineer's Opinion of Probable Construction Cost, March 20, 2015
[7] *See* Appendix A-4 Details of the Opinion of Probable Operations and Maintenance Costs

Table 2-2 Pinal Valley Recharge and Recovery Facility Construction Cost and Projected Off-Site Facilities Fees

Phase	Year	Recharge and Recovery Facility Construction Cost	Projected Off-Site Facilities Fees Available*
One	2016	$2,743,000	$2,360,000
Two	2017	$731,000	$728,000
Three	2018	$747,000	$760,000
Four	2019	$763,000	$791,000
Five	2020	$779,000	$823,000
Total		$5,763,000	$5,462,000

*Projected Off-Site Facilities Fees. Federal or state grants that are received would reduce the need to apply offsite facilities fees or company funds.

2.5. Pinal Valley Recharge and Recovery Facility Feasibility and Customer Savings

Arizona Water analyzed the effect on Pinal Valley customers' water rates by comparing the cost of constructing and operating the Pinal Valley Recharge and Recovery Facility to the cost of constructing and operating a surface water treatment plant, as originally planned in the 2006 CAP Use Plan. Table 2-3 below shows the cost savings achieved by constructing, operating and maintaining the Pinal Valley Recharge and Recovery Facility instead of the costly and labor-intensive surface water treatment plant.[8]

Table 2-3 Cost Savings Associated with Pinal Valley Recharge and Recovery Facility

Category	Surface Water Treatment Plant	Recharge and Recovery Facility	*SAVINGS*
Construction Cost	$94.3 million	$5.8 million*	**$88.5 million**
Annual Operating and Maintenance Costs	$4.5 million	$2.1 million	**$2.4 million**
Annual Overall Revenue Requirement	$19.6 million	$2.1 million	**$17.5 million**
Monthly Customer Cost	$27.13	$2.87	**$24.26 or 89%**

* This amount is paid by offsite facilities fees and would not be in rate base.

As Table 2-3 shows, delivering CAP water to customers through recharge and recovery at Arizona Water's Pinal Valley Recharge and Recovery Facility will save customers $17.5 million per year compared to constructing, operating, and maintaining a costly surface water treatment plant. As a result, the average residential customer will save $24.26 per month, or 89%, compared to a surface water treatment plant. As a result, Arizona Water's plan to use CAP water through recharge and recovery at the Pinal Valley Recharge and Recovery Facility is the most cost-effective, practical and thus feasible option.

[8] *See* Appendix A-5 for cost details.

Beyond the cost savings for the average residential customer, another reason to construct the Pinal Valley Recharge and Recovery Facility instead of a costly surface water treatment plant is the limited availability of contributed capital through offsite facilities fees. Given the low level of customer growth in the Pinal Valley service area over the past eight years and the corresponding low amount of offsite facilities fees, Arizona Water would need to raise approximately $90 million of investment capital (i.e. equity or debt) to pay for a costly surface water treatment plant. To put that $90 million of plant investment into perspective, constructing a costly surface water treatment plant would increase Arizona Water's Pinal Valley water system rate base by nearly 145%. On the other hand, Arizona Water expects to be able to fund most, if not all of the entire cost of the Pinal Valley Recharge and Recovery Facility with offsite facilities fees and federal and state grants, which are recorded as contributions in aid of construction and excluded from rate base, thereby keeping customer rates low.

Given the cost savings and the feasibility of the Pinal Valley Recharge and Recovery Facility, constructing a costly surface water treatment plant is neither feasible nor prudent now or in the foreseeable future.

2.6. Interim Plan to Recharge and Recover CAP Water

Prior to completing construction of the Pinal Valley Recharge and Recovery Facility, Arizona Water plans to store and recover CAP water for delivery to customers on an interim basis starting in 2015 by storing CAP water at groundwater savings facilities. To this end, Arizona Water has been able to negotiate short-term contracts with the Central Arizona Irrigation and Drainage District, the Maricopa-Stanfield Irrigation and Drainage District and the Hohokam Irrigation and Drainage District, to store CAP water in groundwater savings facilities owned and operated by these entities.

Under this interim approach, Arizona Water will schedule delivery of CAP water to these irrigation districts in lieu of their pumping groundwater. Under the terms of Arizona Water's water storage permit, every acre-foot of water delivered to the irrigation districts for use in lieu of pumping groundwater generates an acre-foot of CAP water storage credit. Arizona Water can then recover an equivalent amount of stored CAP water from its recovery wells and directly deliver recovered CAP water to its Pinal Valley customers.

Under the groundwater savings facilities contracts, Central Arizona Irrigation and Drainage District, Maricopa-Stanfield Irrigation and Drainage District and Hohokam Irrigation and Drainage District will pay $36 per acre-foot to help offset Arizona Water's cost to purchase CAP water for groundwater storage. These offsets reduce the net cost of CAP water to Arizona Water and its customers.

Additionally, in 2015, Arizona Water applied for and received $357,500 in grant funding from ADWR's Water Management Assistance Program for the purpose of increasing the amount of CAP water stored in calendar year 2015. As shown in Table 2-4, both the groundwater savings facilities offsets and the ADWR grant greatly reduce the cost of CAP water to Arizona Water and its customers.

In 2015, Arizona Water will store 2,500 acre-feet of CAP water at Maricopa-Stanfield Irrigation and Drainage District's groundwater savings facilities, and 2,500 acre-feet at Central Arizona Irrigation and Drainage District's groundwater savings facilities. Arizona Water

plans to increase the amount of CAP water stored at groundwater savings facilities by 1,000 acre-feet each year until its full allocation is delivered to the company's customers from the recharge and recovery facility or through direct deliveries for non-potable use. As each phase of the Pinal Valley Recharge and Recovery Facility is completed, Arizona Water will shift deliveries of CAP water to that facility from the interim groundwater savings facilities.

Table 2-4 below shows the projected schedule and net cost of CAP deliveries to the groundwater savings facilities and the Pinal Valley Recharge and Recovery Facility by year:

Table 2-4 CAP Water Deliveries and Cost to Recharge CAP Water

Year	Pinal Valley Recharge and Recovery Facility (AF)	Groundwater Savings Facility Recharge (AF)	Cost of CAP Water ($/AF)	Groundwater Savings Facility Offset ($/AF)	ADWR Grant ($)	Total Recharge and Recovery Facility Cost ($)	Total Groundwater Savings Facility Cost ($)	Annual Recharge Cost ($)
2015	0	5,000	$157	$36	$357,500	$0	$247,500	$247,500
2016*	0	6,000	$161	$36	TBD	$0	$750,000	$750,000
2017	2,650	4,350	$166	$36	TBD	$439,900	$565,500	$1,005,400
2018	5,400	2,600	$171	$36	TBD	$923,400	$351,000	$1,274,400
2019	8,000	956	$174	$36	TBD	$1,392,000	$131,928	$1,523,928
2020**	8,956	0	$196	N/A	TBD	$1,755,376	N/A	$1,755,376

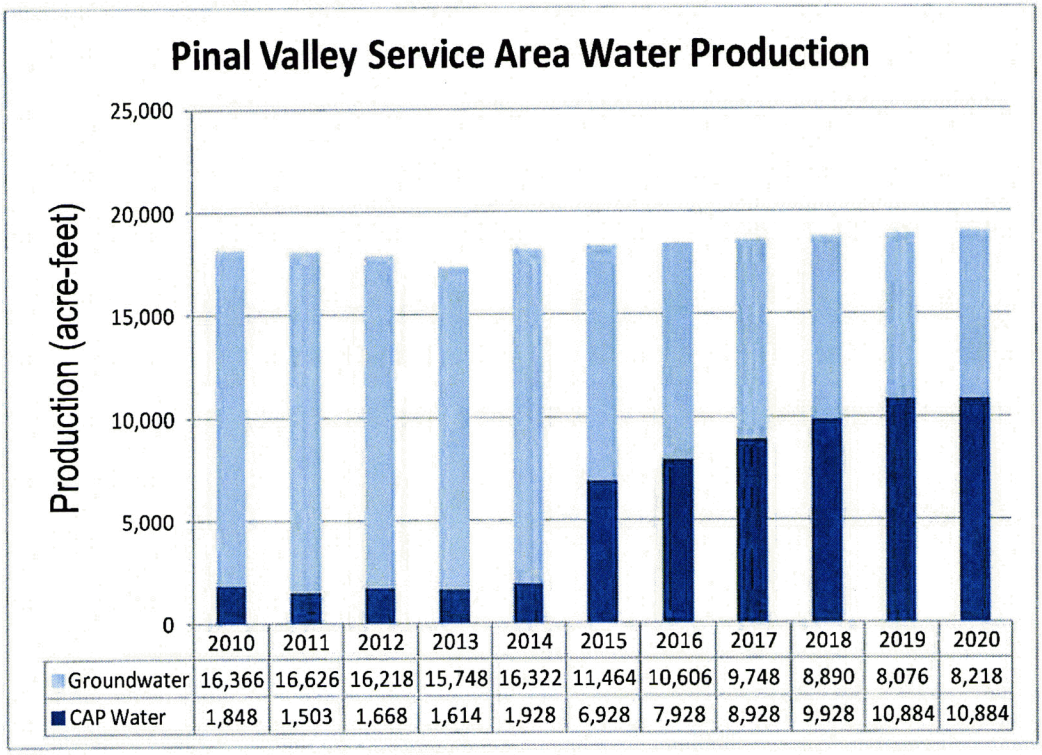
*Note 1: CAP water ordered for 2017 at the Pinal Valley Recharge and Recovery Facility after first recharge basin is completed.

**Note 2: 8,956 AF Based on present CAP allocation (10,884 AF - 1,928 AF) and 1,928 AF delivered directly to non-potable users.

2.7. Future Water Supplies Under this 2015 CAP Use Plan

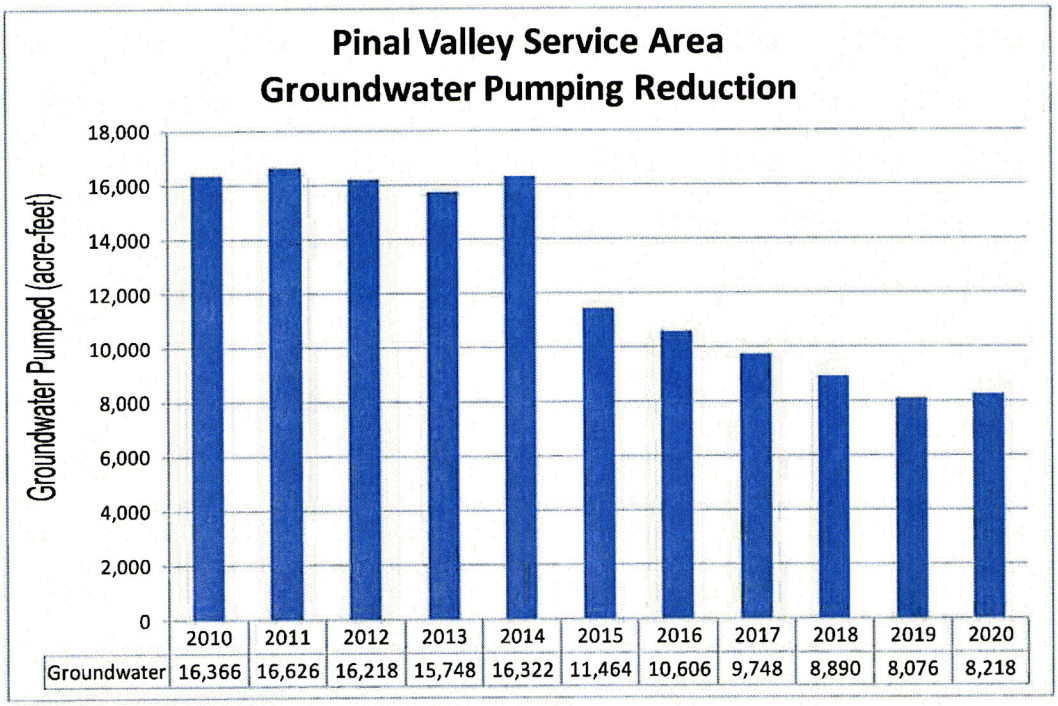
Arizona Water's total 2014 water production in its Pinal Valley service area, including Tierra Grande and Stanfield, was 18,214 acre-feet, with pumped groundwater making up nearly 90% of all water production. Implementing this 2015 CAP Use Plan will significantly increase the amount of CAP water recharged and recovered as shown in Figure 2-4, below.

Figure 2-4 Pinal Valley Service Area Water Production



Under this 2015 CAP Use Plan, Arizona Water will reduce groundwater pumping from 2014 levels by over 50% or 8,000 acre-feet by 2019, as shown in Figure 2-5. Over the next ten years, Arizona Water will recharge an average of 8,000 acre-feet of CAP water per year and will have saved nearly 80,000 acre-feet of groundwater.

Figure 2-5 Pinal Valley Service Area Groundwater Pumping Reduction



3. State and Regional Water Policies Require Arizona Water to Effectively Use its CAP Water Supplies

3.1. Arizona's Need to Address Water Supply Sustainability

Arizona has a long history of successfully addressing the state's need for sustainable, renewable, and effectively managed water supplies, while meeting water users' needs. Since Arizona Water completed its 2006 CAP Use Plan, the State of Arizona, as well as a number of federal agencies, have completed studies, reports, assessments and plans documenting current and future water resource planning needs in Arizona and in other states that rely on Colorado River water. Four of these key documents that Arizona Water relied upon and references in this 2015 CAP Use Plan are:

- *Draft Demand and Supply Assessment 1985-2025: Pinal Active Management Area*, May 2011 – This assessment was prepared by ADWR as background for development of the Fourth Management (Conservation) Plan for the Pinal AMA. ***ADWR's assessment concludes that groundwater pumping will likely increase in the Pinal AMA through 2025.***

- *U.S. Bureau of Reclamation, Colorado River Basin Water Supply and Demand Study: Study Report*, 2012 – This study, prepared by the Bureau of Reclamation, represents the most comprehensive analysis ever undertaken within the Colorado River Basin. ***This study concludes that there is an increased likelihood of future shortages of Colorado River water, having the greatest impact on agricultural users and affecting other CAP users as well.***

- *Arizona's Next Century: A Strategic Vision for Water Supply Sustainability*, January 2014 - This report was prepared by ADWR as a next step to identify possible strategies to address identified water supply and demand imbalances. ***ADWR's study concludes that an appropriate water management strategy needs to include underground storage and recovery of CAP water and reclaimed water.***

- *Recovery of Water Stored by the Arizona Water Banking Authority*, April 2014 – This plan is a collaborative effort among the AWBA, ADWR, CAP and stakeholders to provide a roadmap for recovering CAP water stored in each of the AMAs by the AWBA. ***This plan recommends that entities in the Pinal AMA pursue the construction of underground storage facilities to store CAP water.***

As summarized above, these studies, reports, assessments, and plans conducted by state and federal agencies demonstrate the urgent need to address issues ranging from an increase in groundwater pumping to shortages of Colorado River water. The state agencies charged with addressing these challenges, ADWR, CAP and AWBA, agree that maximizing recharge of available CAP water for underground storage and recovery must play an integral role in assuring

that Arizona's water users have long-term reliable, renewable, and sustainable sources of supply, even as flows and availability of water from the Colorado River become less predictable.

3.2. The Groundwater Management Act

Prior to 1980, groundwater pumping in Arizona was largely unregulated which led to groundwater overdraft. In response, Arizona adopted one of the most comprehensive groundwater management programs in the United States – the 1980 Groundwater Management Act.[9] In order to facilitate management of groundwater supplies in areas where historical groundwater overdraft had been particularly severe, the Groundwater Management Act designated AMAs within certain high growth and water use areas in the state. Arizona Water's Pinal Valley service area is located in the Pinal AMA. The management plans for the AMAs, including the Pinal AMA, are administered by ADWR and require municipal water providers, like Arizona Water, to progressively reduce their reliance on groundwater through the use of renewable water supplies like CAP water, recycled water, or through member land or service area enrollment in the Central Arizona Groundwater Replenishment District.[10] [11]

The Pinal AMA, shown in Figure 3-1, covers approximately 4,000 square miles in the south-central portion of Arizona. The management goal for the Pinal AMA is to (1) allow development of non-irrigation water uses, (2) extend the life of the agricultural economy as long as feasible, and (3) preserve water supplies for future non-irrigation uses.[12]

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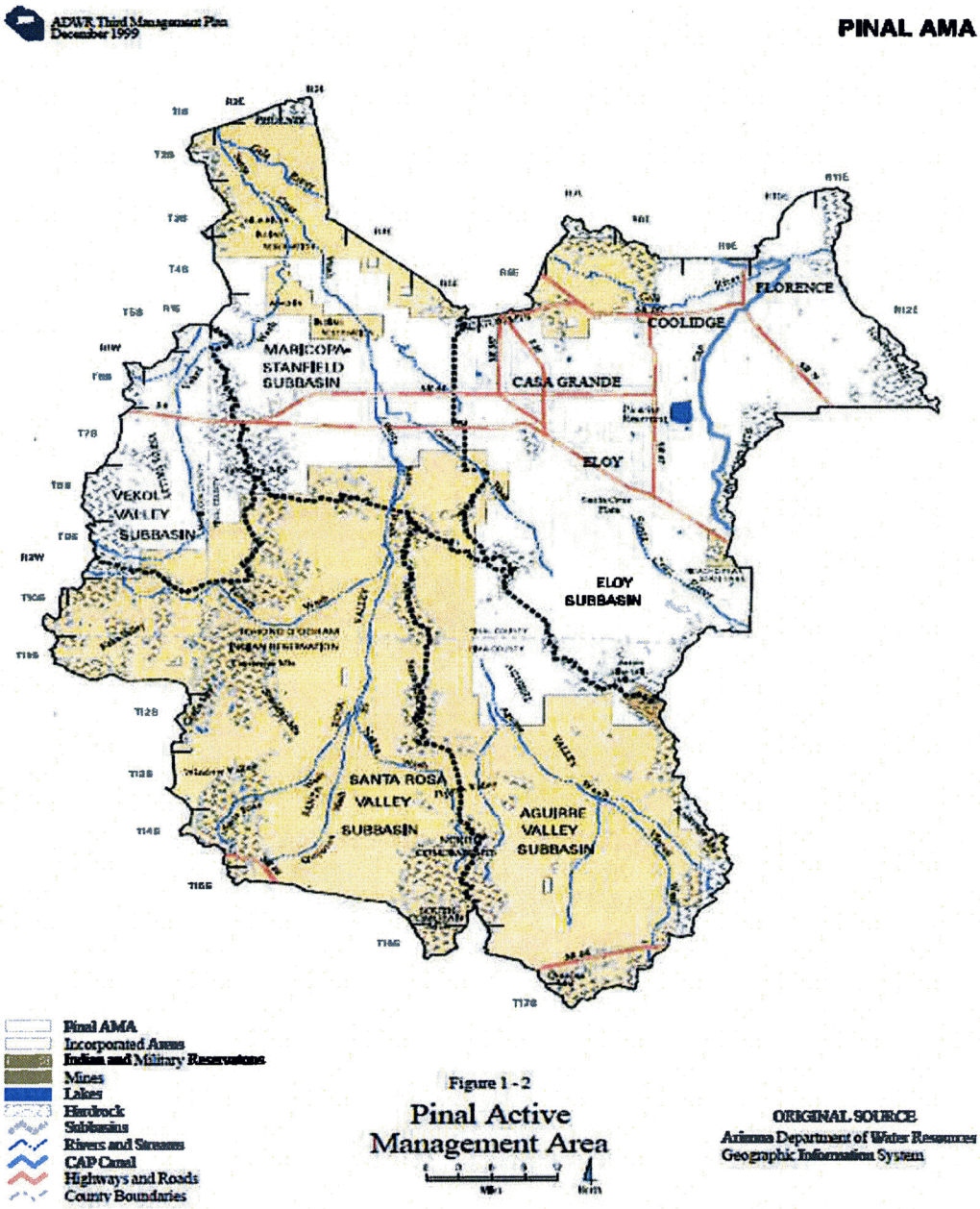
[9] *See* A.R.S. §45-401 through §45-704

[10] *See* A.R.S. §45-801.01 1-2 requiring the use of renewable supplies, such as Colorado River water

[11] The Central Arizona Groundwater Replenishment District is the name used to describe the groundwater replenishment authority operated by the Central Arizona Water Conservation District the entity charged with operating and maintaining the CAP aqueduct throughout its three-county service area.

[12] Arizona Department of Water Resources, *Third Management Plan for Pinal Active Management Area*, 1999, Phoenix, 1-2.

Figure 3-1 Pinal AMA



As discussed in Section 2.7 and shown in Figures 2-2 and 2-3 Arizona Water will reduce groundwater pumping by 5,000 acre-feet in 2015, with corresponding increases in recovery of stored CAP water, followed by annual increases of 1,000 acre-feet of CAP recharge each year thereafter until its full CAP water allocations of 10,884 acre-feet are put to beneficial use, further reducing the need to pump groundwater. As a result, Arizona Water's water supply management strategy complies with the State of Arizona's public policy that requires greater use of renewable supplies such as CAP water. Arizona Water's 2015 CAP Use Plan also helps to achieve the Pinal AMA's management goal of preserving available groundwater supplies for future non-irrigation uses.

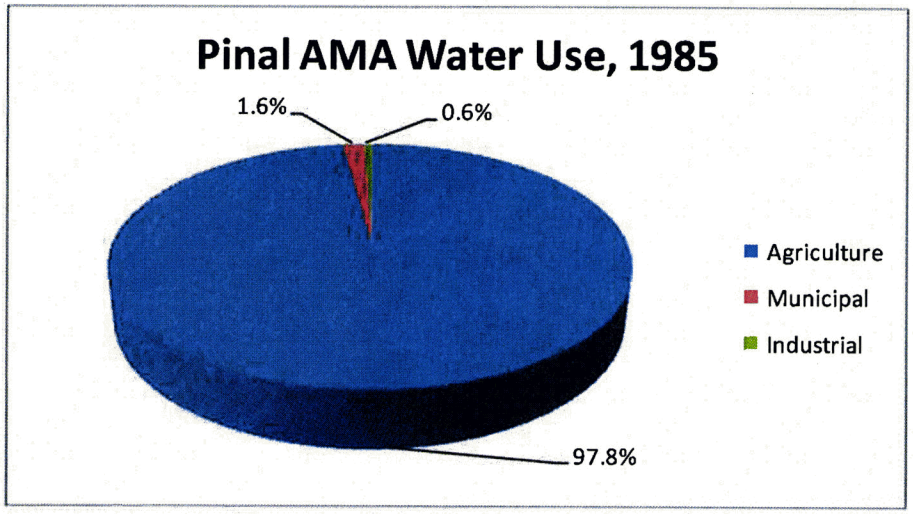
3.3. Water Use in the Pinal AMA

In the Pinal AMA, water is used primarily to meet municipal, industrial, agricultural and Indian demands. Beneficial uses of water, as defined by ADWR, are summarized as follows:

- Municipal water use, which includes water delivered for non-irrigation uses by a city, town, private water company or irrigation district.
- Industrial water use, which includes non-irrigation uses of water not supplied by a city, town, or private water company. Industrial use includes uses by animal industries, mines and power plants.
- Agricultural water use is water for agricultural uses (growing of crops) not located on Indian Reservations.
- Indian water use is either municipal or agricultural water used on Indian Reservations.

In 1985, total water use in the Pinal AMA was 865,024 acre-feet. At that time, non-Indian and Indian agricultural use accounted for 97.8 percent of total water use in the Pinal AMA, while municipal and industrial use collectively accounted for 2.2 percent (1.6 percent for municipal and 0.6 percent for industrial) (*See* Figure 3-2).[13]

Figure 3-2 Pinal AMA Water Use 1985



As shown in Table 3-1 below, total water use in the Pinal AMA increased by nearly 19 percent, from 865,024 acre-feet in 1985 to 1,029,230 acre-feet in 2006.[14] Municipal water use increased from 13,607 acre-feet to 32,968 acre-feet and industrial water use increased from 4,995 acre-feet to 20,243 acre-feet during this same time period, collectively accounting for

[13]ADWR's *Draft Demand and Supply Assessment 1985-2025 Pinal Active Management Area*, 42.
[14]Ibid.

5.2 percent of total water use in the Pinal AMA in 2006. Non-Indian agricultural and Indian communities water use increased from 846,422 acre-feet in 1985 to 976,019 acre-feet in 2006, accounting for 94.8 percent of total water use in the Pinal AMA in 2006.

Table 3-1 Water Used in Pinal AMA in 1985 and 2006 (in Acre Feet)

	1985		2006	
Non-Indian Agriculture Use	792,092		819,894	
Indian Communities Use	54,330		156,125	
Total Agriculture Use	846,422	97.8%	976,019	94.8%
Municipal Use	13,607	1.6%	32,968	3.2%
Industrial Use	4,995	0.6%	20,243	2.0%
Total Municipal and Industrial Use	18,602	2.2%	53,211	5.2%
Total Use	865,024	100.0%	1,029,230	100.0%

3.4. Future Water Uses in the Pinal AMA

ADWR's *Draft Demand and Supply Assessment 1985-2025 Pinal Active Management Area, May 2011* provides three water demand scenarios for the year 2025 for each category of water use in the Pinal AMA. In all demand scenarios, municipal and industrial water uses are expected to increase by 2025 as the Pinal AMA urbanizes and population increases. ADWR projects total agricultural use to remain flat or decline over the long-term.

As shown in Table 3-2, agriculture (Irrigation districts and Indian communities) represents the largest historical and projected use of water in the Pinal AMA.[15] Irrigation district water use is the total water used by four irrigation districts: Central Arizona Irrigation and Drainage District, Maricopa-Stanfield Irrigation and Drainage District, Hohokam Irrigation and Drainage District and the San Carlos Irrigation and Drainage District. The Gila River and Ak-Chin Indian Communities, located immediately north of Arizona Water's Pinal Valley service area, are the largest Indian agricultural users.

Table 3-2 Water Used in Pinal AMA (1985) and Projected Use (2025)

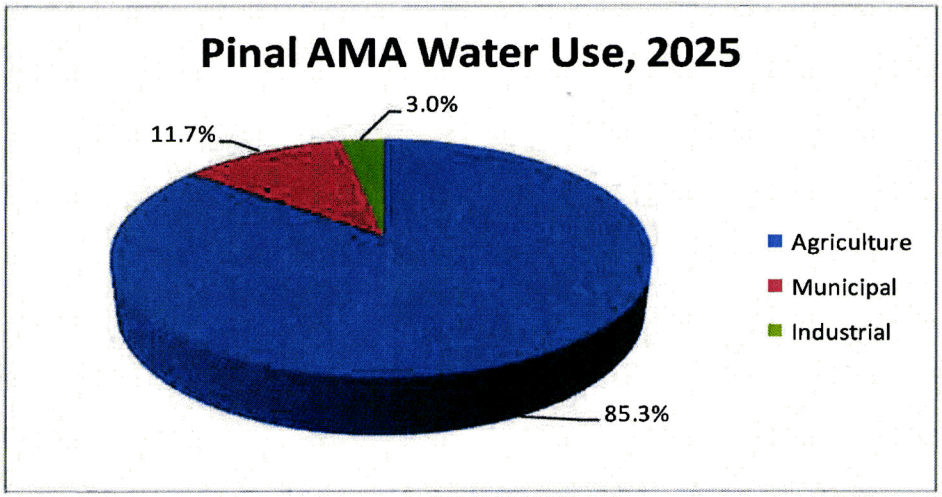
	Water Used (1985)	% of Total	Projected Use (2025)	% of Total
Irrigation Districts	792,092		689,180	
Indian Communities	54,330		194,616	
Total Agriculture	846,422	97.8	883,796	85.3
Municipal	13,607	1.6	121,175	11.7
Industrial	4,995	0.6	31,042	3.0
Total AF	865,024	100.0	1,036,013	100.0

In all three water demand scenarios, agricultural use (Irrigation districts and Indian communities) will continue to make up the majority of water use in the Pinal AMA in 2025, although declining slightly to 85.3 percent of total water use (See Figure 3-3). ADWR

[15] Ibid

projects municipal water use to increase to 11.7 percent of total water use with industrial water use accounting for 3 percent of total water use.

Figure 3-3 Pinal AMA Water Use - Projected 2025



3.5. Available Water Supplies in the Pinal AMA

Prior to the availability of CAP water in 1987, groundwater made up 74 percent of water supplies and the Gila River made up 26 percent of water supplies in the Pinal AMA.[16] [17]

The makeup of water supplies in the Pinal AMA began to change in 1987 after CAP made its first deliveries of Colorado River water to the Pinal AMA from the CAP aqueduct. In the Pinal AMA, CAP water is delivered directly for agricultural purposes or is delivered to agricultural irrigation districts in lieu of pumping groundwater through groundwater savings facilities. Lesser amounts of untreated CAP water are delivered for municipal and industrial water uses. Similar to this 2015 CAP Use Plan, the Pinal County Water Augmentation Authority stored CAP water at groundwater savings facilities owned and operated by Central Arizona Irrigation and Drainage District and Maricopa-Stanfield Irrigation and Drainage District on behalf of the Town of Florence and the City of Eloy, two Pinal AMA municipal providers with CAP allocations. As of December 31, 2014, there was only one small surface water treatment plant in the Pinal AMA located at the Ak-Chin Indian Community.

Deliveries of CAP water to the Pinal AMA in 1987 dramatically reduced reliance on mined native groundwater. Over the ten-year period from 2000 to 2009, groundwater made up 46 percent of water supplies, CAP water made up 46 percent of water supplies, and Gila River water made up the balance of water supplies (See Figure 3-4). [18] [19] Use of groundwater declined from 1985 to 2009 despite the fact that overall water use increased by 30 percent during

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[16] Reclaimed water and CAGRD Replenishment are used in the Pinal AMA but represent only about 0.3 percent of supply.

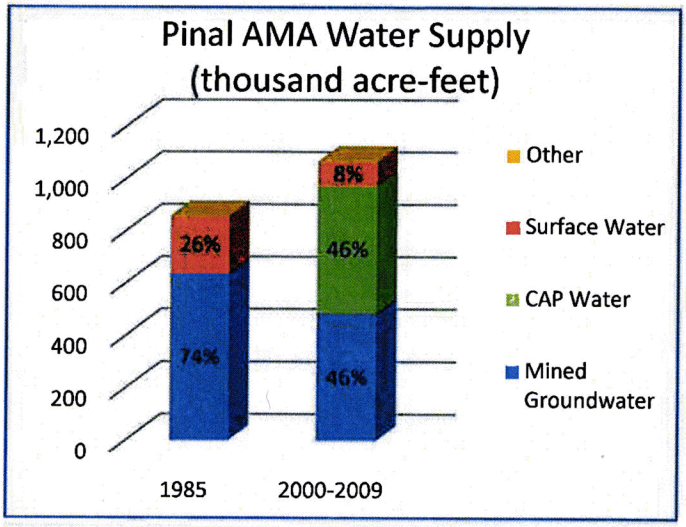
[17] ADWR's *Draft Demand and Supply Assessment 1985-2025 Pinal Active Management Area*, 42.

[18] Includes CAP water used directly and CAP water used in lieu of pumping groundwater.

[19] ADWR, *Pinal AMA Summary Budget*.

this same time period. This is particularly notable since water supplies from the Gila River were significantly reduced during this same time period because of the ongoing drought. As illustrated in Figure 3-4, CAP water supplies significantly reduced the use of mined groundwater. Over the ten-year period from 2000 to 2009, mining of groundwater decreased by an average of over 150,000 acre-feet annually, a decrease of 31 percent from 1985.

Figure 3-4 Pinal AMA Water Supply



3.6. The Future of CAP Water Supplies in the Pinal AMA

As of 2012, approximately 40 million people in seven western states relied on the Colorado River for water supplies.[20] Despite recently experiencing the worst 14-year drought in the last century, to date there has not been a declared shortage on the Colorado River that has affected CAP water deliveries to Arizona.[21] However, as of February 2015, Lake Mead is at approximately 41 percent of capacity.[22] Water levels at Lake Mead are important because the Bureau of Reclamation uses these water levels to determine whether to declare a shortage in supply and to what degree.

Declared shortages by the Bureau of Reclamation can reduce Colorado River water deliveries to the CAP depending on the severity of the declared shortage. For example, the Bureau of Reclamation has three tiers of shortage, Tier 1, Tier 2 and Tier 3, which have a specific effect on Arizona's water supplies from the Colorado River through the CAP. Water users in Arizona who rely on deliveries from the CAP aqueduct incur the majority of any restrictions or reductions in deliveries caused by declared shortages. Appendix A-6 provides greater detail of the process of reducing Colorado River water deliveries to CAP during declared shortages.

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[20]U.S. Department of the Interior, Bureau of Reclamation, *Colorado River Basin Water Supply and Demand Study: Study Report*, 2012, 2

[21] Ibid., 3

[22]U.S. Department of the Interior, Bureau of Reclamation, *Lower Colorado Water Supply Report*, http://www.usbr.gov/lc/region/g4000/weekly.pdf, accessed 2/10/2015.

If drought conditions persist, Arizona could soon face a reduction of nearly one third of its Colorado River water supply.[23] Longer-term drought conditions could cause more severe reductions to Arizona's CAP water supply. During Tier 1, Tier 2 and Tier 3 declared shortages, water users without a CAP subcontract or with CAP subcontracts with a lower priority than Arizona Water will have CAP water deliveries reduced or even eliminated depending on the severity of the shortage. Arizona Water's Municipal and Industrial ("M&I") priority subcontracts have a high priority and somewhat lesser risk of reduced deliveries except under shortages more severe than a Tier 3 shortage. Agricultural users are most affected by declared shortages since they do not have CAP subcontracts and receive Excess CAP water or non-Indian Agricultural priority CAP water, which have a lower priority than M&I priority CAP water.

In addition to the possibility of shortage and reduced deliveries of CAP water, CAP also plans to reduce deliveries to non-Indian agricultural users in the Pinal AMA by 75,000 acre-feet per year in 2017, with an additional 25 percent reduction in 2024. After 2030, CAP plans no deliveries to non-Indian agricultural users. As a result, non-Indian agricultural users will be forced to pump more groundwater to make up the shortfall caused by planned reductions in CAP water deliveries or any mandatory reductions because of declared shortages on the Colorado River.

3.7. The Future of Groundwater Supplies in the Pinal AMA

As of April 2015, the AWBA and the CAWCD had 1.7 million acre-feet of CAP water stored in the Pinal AMA through recharge at the Maricopa-Stanfield Irrigation and Drainage District, Central Arizona Irrigation and Drainage District and Hohokam Irrigation and Drainage District GSFs. In addition, as of April 27, 2015, ADWR reports that nearly 2.5 million acre feet of CAP water is stored at these groundwater savings facilities in the Pinal AMA for the following purposes:

- Assured water supplies
- Recovery during declared shortages
- Indian water Settlement purposes
- Southern Nevada's allocation of Colorado River water

Like Arizona Water, AWBA and CAWCD plan to recover stored CAP and Colorado River water for the above-listed purposes by using recovery wells. For example, AWBA's recovery plan projects the need to recover small volumes of water as early as 2017.[24] In order to prepare for this, AWBA encourages municipal and industrial subcontractors, such as Arizona Water to develop underground storage facilities in the Pinal AMA. Additionally, in late 2014 CAP started reaching out to CAP subcontractors, such as Arizona Water, to develop recovery strategy partnerships.[25] Arizona Water could also operate its recovery wells to recover CAP water stored by AWBA or CAWCD as part of this recovery strategy.

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[23]U.S. Bureau of Reclamation, Colorado River Basin Water Supply and Demand Study, Study Report, December 2012, 6.

[24] Recovery of Water Stored by the AWBA, April 2014

[25] Ibid., 52

4. Conclusion

This 2015 CAP Use Plan identifies and explains how Arizona Water is implementing solutions to water supply uncertainties facing Arizona Water's Pinal Valley service area. According to the Bureau of Reclamation, the likelihood of declared shortages of Colorado River water means that CAP M&I subcontractors like Arizona Water face the risk of cutbacks and curtailments in CAP deliveries when declared shortages on the Colorado River reduce flows in the CAP aqueduct. At the same time, municipal and industrial water use will increase as development occurs in the Pinal AMA.

For these reasons, Arizona Water's 2015 CAP Use Plan carefully examined and analyzed:

- Arizona's public policy of using renewable supplies like CAP water to meet water demands,
- Effects of drought and groundwater overdraft,
- Need to develop a sustainable, renewable, and reliable long-term supply of water,
- Need for a cost-effective and practical way to use CAP water through recharge and recovery facilities, and
- How to make full beneficial use of Arizona Water's CAP water and minimize the effect on customers' water rates.

As a result of that study, Arizona Water already has CAP water in underground storage in cooperation with local irrigation districts and is moving forward to design and construct the Pinal Valley Recharge and Recovery Facility with the following benefits:

- Implements Arizona's public policy of using renewable CAP water supplies to meet Pinal Valley customers' water needs,
- Recharges and recovers CAP water to help mitigate the effects of drought and groundwater overdraft,
- Achieves a renewable, sustainable and reliable long-term supply of water for Pinal Valley customers,
- Saves $88.5 million in construction costs and $2.4 million in annual operating and maintenance costs compared to the cost of designing, constructing, operating and maintaining a costly and labor intensive surface water treatment plant, and
- Saves the average residential customer $24.26 per month or 89% compared to the costly and labor intensive surface water treatment plant.

EXHIBIT FKS-13

DOUGLAS A. DUCEY
Governor

THOMAS BUSCHATZKE
Director

ARIZONA DEPARTMENT of WATER RESOURCES
3550 North Central Avenue, Second Floor
Phoenix, Arizona 85012-2105
602.771.8500
azwater.gov

December 21, 2015

CERTIFIED MAIL
Arizona Water Company
Attn: Mr. Fredrick Schneider
3805 N. Black Canyon Highway
Phoenix, AZ 85015-5351

Re: Decision of the Director to Grant Underground Storage Facility (USF) Permit, No. 71-224242.0000, and Water Storage (WS) Permit, No. 73-224242.0000 to Arizona Water Company

Dear Mr. Schneider:

This letter is the Decision of the Director of the Arizona Department of Water Resources ("Department") to grant Underground Storage Facility Permit No. 71-224242.0000 and Water Storage Permit No. 73-224242.0000 to Arizona Water Company to store water at the Pinal Valley Recharge Underground Storage Facility.

Please note that under A.R.S. § 45-852.01(B)(1), water stored pursuant to a water storage permit may be credited to a long term storage account only if the water is water that cannot reasonably be used directly. Under A.R.S. § 45-802.01(22)(a), the amount of Central Arizona Project water stored in an active management area during a year by a municipal provider is considered water that cannot reasonably be used directly only to the extent that it exceeds the amount of mined groundwater withdrawn during the year by the storer in the active management area. Therefore, after this water storage permit is issued, if the permit holder withdraws mined groundwater from within the Pinal active management area in any year, the amount of Central Arizona Project water stored by the permit holder during the year pursuant to the permit equal to the amount of mined groundwater withdrawn will not be eligible for long-term storage credits, but may be considered as being available for recovery on an annual basis under A.R.S. § 45-851.01.

This Decision of the Director to grant Underground Storage Facility (USF) Permit No. 71-224242.0000 and Water Storage (WS) Permit No. 73-224242.0000 is an appealable agency action. I have enclosed a copy of the Final Appealable Draft Permits. The Final Appealable Draft Permits will be the final form of your permits upon issuance.

The Department's review of the relevant information establishes that all of the requirements for the issuance of an Underground Storage Facility (USF) permit and Water Storage (WS) permit, as set forth in A.R.S. § 45-811.01 and § 45-831.01, have been met. The Department has received no objections to your applications.

The Department reviewed the comments and proposed changes submitted by you for the initial draft Arizona Water Company Pinal Valley Recharge Project USF permit 71-224242.0000. Below is a summary of your comments and requested permit changes followed by the Department's response:

1. *"Page 3, Section 2.b. should read 'The first reporting period...through December 2016.' not through 2015 because the final permit will not be issued until late this year or early 2016 and construction will not occur until 2016 at the earliest."*

   Department's Response:
   Section 2.b. of the permit has been amended to read "The first reporting period...through December 31, 2016."

2. *"Page 4, Section 3.e.ii. 'The data reports shall contain the **daily wetted area**...' Arizona Water's preliminary design has a sloped bottom making the calculation very difficult. Arizona Water recommends this requirement be removed from the permit as a meter will be installed to measure flow into each recharge basin."*

   Department's Response:
   The permit has been written to incorporate the Cooley method for calculating evaporation from an open water surface (Section 4.d. of the permit). This method requires that the wetted surface area be determined in order to calculate evaporation from each basin. A calculation of evaporation from each basin is necessary in order to account for the amount of water lost to evaporation during recharge operations. The use of this method is confirmed in the Pinal Valley Recharge USF Hydrogeologic Study (Page 27, Section 7.b).

3. *"Page 5, Section 4.b. 'The permittee shall measure the total volume of water delivered to the recharge facility **each day**...' Arizona Water requests that measurement of water delivered to the recharge facility be measured and recorded weekly."*

   Department's Response:
   Page 5, Section 4.b. of the permit was written as described in the USF Hydrogeologic Study (Page 26, Section 6.e) "One metering location is proposed to record the daily volume of water recharged at the facility."

4. *"Page 6, Section 4.d.ii. 'The permittee shall determine the **daily wetted area**...' Same comment and recommendation as noted in item number 2 above."*

   Department's Response:
   The permit was written as described in the USF Hydrogeologic Study (Page 27, Section 7.b) "AWC will determine the daily wetted area for each basin in operation..."

5. *"Page 12, Section 3. Requires a 5-year construction time table. Arizona Water plans to begin construction of the recharge project within this time table. However, due to the availability of grant and other federal funds, the project could be constructed in phases with completion of the final phase sometime beyond five years. Arizona Water requests this section be modified to allow for such work."*

   Department's Response:
   The permit was written as described in the USF Hydrogeologic Study (which did not propose a phased construction of the facility). Arizona Water may request to modify the proposed Pinal Valley Recharge Project to a phased construction and operation time-table. Please contact the Department to schedule a meeting to discuss the phased construction and operation of the facility through a modification to the USF application report and permit.

6. *"Page 14, Table 2. References daily monitoring. Same comment and recommendation as noted in item number 2 above."*

   Department's Response:
   Table 2 of the permit was written as described in the USF Hydrogeologic Study (Page 26, Section 6.e) "One metering location is proposed to record the daily volume of water recharged at the facility."

7. *"Page 15, Table 4. Table 4 lists the maximum wetted area for each recharge basin in acres. This requirement adversely limits Arizona Water's ability to adjust the basin area during the detailed design phase. Arizona Water requests this table be modified to remove the maximum area requirement to allow for optimization of the basin during final design."*

   Department's Response:
   Table 4 of the permit was written as described in the USF Hydrogeologic Study (Figure 4c and Table 1). If after completion, should the basin acreages differ by a small margin, Arizona Water may request that the permit be modified to reflect the as-built basin acreages.

8. *"Page 17, Table 6. requires source water quality monitoring* ***every 6 months*** *for the life of the facility. Because the facility is permitted to recharge Central Arizona Project Water ('CAP Water') and CAP Water quality is known and well documented, Arizona Water should be required to monitor source water quality."*

   Department's Response:
   The last sentenced is assumed to be intended that 'Arizona Water should ***not*** be required to monitor source water quality.' All water that is recharged into the state's aquifers is required to meet Arizona's Aquifer Water Quality Standards (Arizona Administrative Code R18-11-406). In addition, Page 23, Section 6.c.v. of the USF Hydrogeologic Study references Table 9 which describes the proposed source water quality monitoring plan for this facility.

You are entitled to appeal this decision. If you wish to appeal this decision, you must file a written appeal within **thirty (30) days** from receipt of this letter. I am providing you with a summary of the appeal process and appeal form, should you elect to pursue this option.

As no objections have been filed regarding your permit applications, you may elect to complete and file the enclosed Appealable Agency Action Waiver Form, waiving your right to appeal the Director's Decision, so that your permits can be signed without delay.

If you do not file a notice of appeal or the Appealable Agency Action Waiver Form within the 30 day appeal period, the permits shall be signed and issued at the end of the 30 day appeal period.

Please direct any questions concerning the permit or the appeal process to Shannon Reif at (602) 771-8517.

Sincerely,

Richard B. Obenshain, Manager
Recharge, Assured and Adequate Water Supply Programs

Enclosure

RBO/slr

EXHIBIT FKS-14

AGREEMENT FOR DEVELOPMENT OF EFFLUENT RECHARGE FACILITY, EFFLUENT DISPOSAL AND PURCHASE AND SALE OF EFFLUENT

This Agreement for Development of Effluent Recharge Facilities, Effluent Disposal and Purchase and Sale of Effluent ("Agreement") is made this 6 day of February, 2014 (the "Effective Date"), between the Central Arizona Water Conservation District ("CAWCD"), a multi-county water conservation district organized and existing under the laws of the State of Arizona, and Liberty Utilities (Litchfield Park Water & Sewer) Corp. (hereafter "LIBERTY "). LIBERTY and CAWCD are sometimes collectively referred to herein as the "Parties" or individually as a "Party."

RECITALS

A. Pursuant to A.R.S. § 48-3772, CAWCD is authorized to acquire, develop, construct, operate, maintain, replace and acquire permits for water storage for replenishment purposes. CAWCD is also authorized to acquire, transport, hold, exchange, own, or lease water and water rights for replenishment purposes.

B. CAWCD has enrolled member lands and member service areas in the West Salt River Valley groundwater basin of the Phoenix Active Management Area, and to the extent reasonably feasible, CAWCD desires to satisfy its replenishment obligation associated with such member lands and member service areas in close proximity to such members' groundwater pumping sites.

C. LIBERTY is a private water and wastewater utility company in the Phoenix Active Management Area. LIBERTY holds a Certificate of Convenience and Necessity ("CC&N") issued by the Arizona Corporation Commission ("ACC") authorizing LIBERTY to provide public water and wastewater utility service within its CC&N, including delivery of Effluent. LIBERTY's CC&N area encompasses approximately 20 square miles located west of the Agua Fria River between Luke Air Force Base and interstate highway I-10, and may be amended from time to time by order of the ACC.

D. LIBERTY owns and operates the Palm Valley Wastewater Reclamation Facility ("PVWRF") at 14222 W. McDowell Road in Goodyear, Arizona. PVWRF currently produces approximately 3.5 million gallons per day ("MGD") of A+ quality Effluent. LIBERTY is currently permitted to operate PVWRF to a maximum treatment capacity of 8.2 MGD in various phases in the future. In 2012, PVWRF generated 2,340 acre-feet of Effluent in excess of re-use demands and LIBERTY estimates that total Effluent production from PVWRF in excess of reuse demands may increase to approximately 3,000 acre-feet per annum by 2017.

E. In order to support water supply availability within LIBERTY's CC&N and to benefit LIBERTY's utility customers, LIBERTY proposes to recharge into the aquifer any Effluent discharged from the PVWRF and any other Effluent that may be available to LIBERTY

from other sources as determined by LIBERTY in its sole discretion that is not re-used or used by LIBERTY within its CC&N.

F. On June 22, 2010, CAWCD and LIBERTY executed an agreement to cost-share a hydrologic study to determine feasibility of constructing a recharge facility within LIBERTY's CC&N (the "Cost Sharing Agreement"). In entering that agreement, the mutual goal of the Parties was to initiate a long-term partnership between LIBERTY and CAWCD for the development of a recharge facility ("Effluent Recharge Project") to store excess Effluent produced at the PVWRF or other wastewater reclamation facilities, and to enter into a long-term agreement for CAWCD to acquire and receive such excess Effluent from LIBERTY and for LIBERTY to dispose of such excess Effluent. Under the Cost Sharing Agreement, LIBERTY and CAWCD agreed to share the costs of a hydrologic investigation to determine the feasibility of the proposed Effluent Recharge Project.

G. The Cost Sharing Agreement provides that the Hydrologic Feasibility Study will proceed in two phases. Phase 1 involved retaining a hydrological consultant to locate and determine suitable sites for the Proposed Recharge Project. Phase 2 involved retaining a hydrological consultant to provide conceptual designs, cost estimates and a feasibility analysis for construction of the proposed Effluent Recharge Project. The Phase 1 investigation was completed on February 17, 2011 and identified several potential sites for the proposed Effluent Recharge Project. The Cost Sharing Agreement provides that if CAWCD and LIBERTY agreed that the Phase 1 Final Report of the hydrologic feasibility study identifies suitable site(s) for the Effluent Recharge Project acceptable to the Parties within or adjacent to the LIBERTY's CC&N for storage of excess Effluent generated at PVWRF or other potential sources, then LIBERTY and CAWCD would use their best efforts to negotiate and enter into a Memorandum of Understanding outlining the terms of a future agreement for the development, design, funding, construction and operation of the Effluent Recharge Project and CAWCD's acquisition and receipt of excess treated wastewater discharged from PVWRF or other potential sources. The Phase 2 investigation was completed on or about August 1, 2013 and determined that a viable, cost-effective Effluent Recharge Project capable of storing at least 5,000 acre-feet of Effluent annually can be developed and constructed within or adjacent to LIBERTY's CC&N.

H. Section 3.2 of the Cost Sharing Agreement provides that the Memorandum of Understanding shall document the Parties' agreement with respect to the following concepts: (1) the term and duration of a contract to lease excess treated wastewater discharged from PVWRF for replenishment purposes by CAWCD from LIBERTY; (2) the volume of excess treated wastewater discharged from PVWRF to be leased by CAWCD, and (3) the cost and payment terms for such lease agreement. The Parties entered a Memorandum of Understanding Regarding Development of Effluent Recharge Facility and Purchase and Sale of Effluent ("MOU") dated March 7, 2013.

I. The Parties now enter into this Agreement relating to development of the Effluent Recharge Project, disposal of Effluent and Purchase and Sale of Effluent. This Agreement is subject to review and approval by the respective Boards of Directors of LIBERTY and CAWCD and/or their respective executive management. Because the Phase 2 Final Report has concluded that a viable, cost-effective Effluent Recharge Project capable of storing at least

5,000 acre-feet of Effluent annually can be developed and constructed within or adjacent to LIBERTY's CC&N, LIBERTY and CAWCD enter this Agreement relating to construction, operation and use of the Effluent Recharge Project. This Agreement governs (1) the development, design, funding, construction and operation of the Effluent Recharge Project (the "Final Agreement for Development, Design, Funding, Construction and Operation of Effluent Recharge Project" set forth in Article 3 below); (2) the agreement between the Parties for LIBERTY to sell/dispose of and deliver to CAWCD 2,400 acre-feet of Effluent per annum for 100 years (the "Effluent Disposal Agreement" set forth in Article 4 below); and (3) the agreement between the Parties for the purchase by CAWCD of Long-Term Storage Credits accrued by LIBERTY at the Effluent Recharge Project (the "Agreement for Purchase of Long-Term Storage Credits" set forth in Article 5 below). As of the Effective Date, this Agreement shall supersede and replace the MOU between the Parties and the MOU shall be of no further force or effect.

J. The Parties understand and agree that this Agreement relates to disposal of Effluent from PVWRF by LIBERTY through the Effluent Recharge Project, and that CAWCD is not purchasing Effluent for use or re-use. The Parties understand and agree that CAWCD is acquiring an entitlement to 2,400 acre-feet of Effluent per annum for 100 years to be recharged at the Effluent Recharge Project and CAWCD is acquiring the contractual right to purchase Long-Term Storage Credits from LIBERTY relating to the Effluent Recharge Project, all in accordance with the terms and conditions set forth below.

K. All of CAWCD's costs associated with the existing Cost Sharing Agreement, the Phase 1 and Phase 2 investigations and CAWCD's obligations under this Agreement shall be paid using Central Arizona Groundwater Replenishment District funds.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are acknowledged, and intending to be legally bound, the Parties hereby agree as follows:

ARTICLE 1

DEFINITIONS

As used in this Agreement, the following terms, when capitalized, shall mean:

1.1 "ACC" means the Arizona Corporation Commission.

1.2 "ADWR" means the Arizona Department of Water Resources.

1.3 "Agreement for Purchase of Long-term Storage Credits" means the agreement, terms and conditions set forth in Article 5 below between CAWCD and LIBERTY for the purchase by CAWCD of Long-Term Storage Credits accrued by LIBERTY at the Effluent Recharge Project.

1.4 "CAGRD's Account(s)" means (i) the long-term storage account established pursuant to A.R.S. § 45-859.01 for the Phoenix Active Management Area, Account No. 70-411120.0001; (ii) the conservation district account established pursuant to A.R.S. § 45-859.01 for the Phoenix Active Management Area, Account No. 75-411120 and/or (iii) the

conservation district replenishment reserve sub-account for the Phoenix Active Management Area, Account No 70-411120.0002.

1.5 "CAWCD's Storage Capacity Entitlement" means CAWCD's annual entitlement to the Effluent Recharge Project's storage capacity as provided in Section 3.1.3 below and subject to the terms and conditions set forth in this Agreement.

1.6 "Cost Sharing Agreement" means the agreement between CAWCD and LIBERTY dated June 22, 2010 to share the costs of a feasibility study to explore jointly developing an Effluent Recharge Project and the leasing of Effluent to CAWCD.

1.7 "CPI-U" means the Consumer Price Index—All Urban Consumers published by the United States Bureau of Labor Statistics. If the CPI-U ceases publication during the term of this Agreement, then the Parties shall use a substantially similar consumer price index as agreed between the Parties.

1.8 "Delivery Point" means the delivery point interconnecting the Effluent Pipeline with the turnout for the Effluent Recharge Project as determined by LIBERTY.

1.9 "Effluent" means wastewater that is treated or reclaimed so that it is suitable for underground storage pursuant to A.R.S. Titles 45 and 49. Effluent includes treated wastewater that is produced now or in the future from PVWRF, including any future expansions thereof, and Effluent produced at any other wastewater treatment plant as determined by LIBERTY in its sole discretion that may be owned or controlled by LIBERTY.

1.10 "Effluent Entitlement" means the annual entitlement to 2,400 acre-feet of Effluent for a period of 100 years to be granted to CAWCD by LIBERTY pursuant to the terms of the Effluent Disposal Agreement set forth below and subject to the terms, conditions and any adjustments set forth in this Agreement, including the provisions of Section 4.1.6.

1.11 "Effluent Disposal Agreement" means the agreement terms and conditions set forth in Article 4 below between CAWCD and LIBERTY providing for the acquisition and receipt by CAWCD and the sale/disposal and delivery by LIBERTY of 2,400 acre-feet per year of Effluent for 100 years.

1.12 "Effluent Pipeline" means the effluent pipeline from the PVWRF to the boundary of the Effluent Recharge Project site owned by LIBERTY that conveys Effluent produced at PVWRF for reuse, disposal and discharge.

1.13 "Effluent Pipeline Capacity Reservation" means CAWCD's annual right to use capacity of the Effluent Pipeline as provided in this Agreement to transport Effluent from PVWRF to the Effluent Recharge Project.

1.14 "Effluent Recharge Project" means a constructed underground storage facility located within or adjacent to LIBERTY's CC&N capable of storing 5,000 acre-feet of treated Effluent annually.

1.15 "Effluent Recharge Project Operating Agreement" means the Effluent Recharge Project Operating Agreement to be executed between CAWCD and LIBERTY, the form of which is attached hereto as Exhibit A.

1.16 "Effluent Recharge Project Property" means the property on which the Effluent Recharge Project is built.

1.17 "Extraordinary O&M Costs" means those costs that are not Ordinary O&M Costs, including but not limited to non-routine, major maintenance, repair, replacement and capital improvement costs associated with the Effluent Recharge Project and/or the Effluent Pipeline that exceed a cost of $75,000.

1.18 "Final Agreement for Development, Design, Funding, Construction and Operation of the Effluent Recharge Project" means the terms and conditions set forth in Article 3 below between CAWCD and LIBERTY to develop, design, fund, construct and operate the Effluent Recharge Project in or adjacent to LIBERTY's CC&N.

1.19 "Long-Term Storage Credit" is as defined in A.R.S. § 45-802.01(11).

1.20 "Long-Term Storage Credit Transfer Form" is a form, approved by ADWR, to effectuate the assignment of Long-Term Storage Credits, as defined in A.R.S. § 45-854.01(B), and more specifically described in Section 5.1.7 below.

1.21 "LIBERTY's Long-Term Storage Account" means the account established pursuant to A.R.S. § 45-852.01 in LIBERTY's name, Account No. 70-441139.

1.22 "Notice of Substantial Completion" means the notice issued by LIBERTY warranting that construction of the Effluent Recharge Project is substantially complete.

1.23 "Ordinary O&M Costs" means the annual labor, overhead, and material costs for the routine operation, maintenance, monitoring and regulatory reporting at the Effluent Recharge Project. For purposes of this Agreement, the Parties agree that LIBERTY's overhead costs are equal to 10% of the ordinary O&M Costs directly charged to the Effluent Recharge Project and shall not represent or include profit earned by LIBERTY.

1.24 "PVWRF" means the Palm Valley Wastewater Reclamation Facility owned and operated by LIBERTY at 14222 W. McDowell Road in Goodyear, Arizona.

ARTICLE 2

PHASE 2 HYDROLOGIC FEASIBILITY STUDY

2.1 The Phase 2 Hydrologic Feasibility Study was completed on or about August 1, 2013 and determined that a viable, cost-effective Effluent Recharge Project capable of storing at least 5,000 acre-feet of Effluent annually can be developed and constructed within or adjacent to LIBERTY's CC&N. The Phase 2 Study identified several viable project sites located within LIBERTY's CC&N.

ARTICLE 3

FINAL AGREEMENT FOR DEVELOPMENT, DESIGN, FUNDING, CONSTRUCTION AND OPERATION OF EFFLUENT RECHARGE PROJECT

3.1 The Phase 2 Hydrologic Feasibility Study Final Report has concluded that a viable, cost-effective, Effluent recharge facility capable of storing at least 5,000 acre-feet of Effluent annually can be developed and constructed within or adjacent to LIBERTY's CC&N. As a result, the terms and conditions set forth in this section below shall govern the development, design, funding, construction and operation of the Effluent Recharge Project by LIBERTY and CAWCD on the Effluent Recharge Project Property.

3.1.1 **Project Construction and Design.** Upon payment of the amounts set forth below by CAWCD, LIBERTY will design, permit and construct the Effluent Recharge Project, including acquiring all necessary land interests or rights of way for the Effluent Recharge Project. LIBERTY shall be responsible for designing, permitting and constructing the Effluent Recharge Project, including hiring contractors, project scheduling, the location and siting of Effluent Recharge Project facilities and other similar issues.

3.1.2 **Project Financing.** CAWCD shall pay $4,800,000 and LIBERTY shall pay $1,200,000 as payment for costs associated with the development, design, permitting and construction of the Effluent Recharge Project, including any costs associated with acquisition of necessary land interests or rights of way.

3.1.2.1 **Escrow Account.** Within 30 days after execution of this Agreement, CAWCD shall deposit $4,800,000 into an interest-bearing escrow account (the "Escrow Funds") established by LIBERTY with an escrow agent determined by LIBERTY (the "Escrow Agent"). The Parties agree to effectuate and execute necessary agreements with the Escrow Agent subject to the payment instructions set forth in Section 3.1.2.2 below.

3.1.2.2 **Escrow Instructions.** LIBERTY shall be entitled from time to time to withdraw all or any amounts of the Escrow Funds for land acquisition, design, development, permitting and construction of the Effluent Recharge Project upon delivery to the Escrow Agent, with a courtesy copy to CAWCD, of a written certificate executed by an officer of LIBERTY requesting that such funds be released as necessary to cover costs for land acquisition, design, permitting and/or construction of the Effluent Recharge Project. Upon LIBERTY's delivery of such written certification and payment direction to Escrow Agent, Escrow Agent shall immediately release and pay to LIBERTY that portion of the Escrow Funds requested from escrow in the amounts and as directed by LIBERTY. CAWCD understands the $4,800,000 payment represents the costs associated with the acquisition of the Effluent Entitlement and CAWCD's Storage Capacity Entitlement (as defined below), and is, therefore, non-refundable to CAWCD in the event that actual costs for development, design, permitting and construction of the Effluent Recharge Project are less than $6,000,000.

3.1.2.3 **Development Costs.** LIBERTY's and CAWCD's costs for the Phase 1 and Phase 2 Hydrologic Feasibility Studies under the Cost Sharing Agreement shall be considered development costs under Section 3.1.2 above. CAWCD shall be entitled to a credit for its portion of costs paid pursuant to the Cost Sharing Agreement against its $4,800,000 payment referenced in Section 3.1.2 above. LIBERTY shall be entitled to a credit for its portion of costs paid pursuant to the Cost Sharing Agreement against its $1,200,000 payment referenced in Section 3.1.2 above.

3.1.2.3.1 CAWCD and LIBERTY believe that the Effluent Recharge Project can be constructed for an amount of $6,000,000 or less, including land acquisition, permitting and construction. If the total cost of the Effluent Recharge Project is less than $6,000,000, then any interest accrued on funds deposited into escrow pursuant to Section 3.1.2 will be credited to CAWCD subject to Section 3.1.2.3.2 below.

3.1.2.3.2 If the total cost of the Effluent Recharge Project plus LIBERTY's attorney's fees and legal costs associated with seeking ACC approval pursuant to Section 6.1 below is greater than $6,000,000, then LIBERTY's attorney's fees and legal costs associated with seeking ACC approval pursuant to Section 6.1 shall be included as costs associated with the development, design, permitting and construction of the Effluent Recharge Project. In the event that the total costs of the Project (including LIBERTY's attorney's fees and legal costs noted above) is greater than $6,000,000, then any interest accrued on funds deposited into escrow pursuant to Section 3.1.2.1 will be applied to cover project costs (including LIBERTY's attorney's fees and legal costs noted above) in excess of $6,000,000. If, after the application of interest on escrowed funds, there are still excess project costs, then LIBERTY will pay the excess costs, or LIBERTY may request that CAWCD pay the excess costs, and in such event CAWCD shall pay such excess costs upon request by LIBERTY. If, after application of interest on escrowed funds, there is still remaining interest earned, then any such remaining interest shall be credited to CAWCD. If CAWCD pays excess costs pursuant to this section above the application of interest, then the Parties shall amend the Effluent Disposal Agreement in Article 4 below to increase the volume of the Effluent Entitlement at a rate of one additional acre-foot of Effluent to be disposed of by LIBERTY and delivered to CAWCD for every $2,547 of excess cost paid by CAWCD. Also, CAWCD's Storage Capacity Entitlement and Effluent Pipeline Capacity Reservation shall be increased to correspond with any adjustment to the Effluent Entitlement pursuant to this Section 3.1.2.3.2.

By way of example and for illustration purposes only, if the project costs of the Effluent Recharge Project total $5,980,000 and LIBERTY incurs $50,000 in attorney's fees and legal costs, then the total cost of the Project under this section is $6,030,000. If the $4,800,000 deposited in escrow earned $20,000 in interest, then that $20,000 in interest will be applied to pay the total project cost of $6,030,000. In this example, the remaining $10,000 of unpaid Project costs either would be paid by LIBERTY or, at LIBERTY's request, would be paid by CAWCD with an associated increase in Effluent Entitlement, CAWCD's Storage Capacity Entitlement and Effluent Pipeline Capacity Reservation of 3.93 acre-feet ($10,000/$2,547). Similarly, if the project costs total $5,980,000 and LIBERTY incurs $25,000 in attorney's fees and legal costs, then the total project costs would be $6,005,000 under this section. In that example, if the $4,800,000 deposited in escrow earned $20,000 in interest, then $5,000 of that interest would be used to reimburse LIBERTY for the added costs above $6,000,000 and CAWCD would be entitled to retain the remaining $15,000 in interest.

3.1.3 **CAWCD's Storage Capacity Entitlement.** In exchange for CAWCD's payment pursuant to Section 3.1.2 above and subject to the terms and conditions set forth in this Agreement, LIBERTY hereby grants CAWCD an annual entitlement to 2,400 acre-feet of the Effluent Recharge Project's storage capacity ("CAWCD's Storage Capacity Entitlement"), subject to any adjustments made pursuant to Section 3.1.2.3.2, and subject to any terms, conditions and limitations pursuant to Section 4.1.6 below. CAWCD's Storage Capacity

Entitlement shall be for a period of 100 years commencing on the date of issuance of the Notice of Substantial Completion. Except as provided in Section 3.1.2.3.2, the Parties understand and agree that CAWCD's Storage Capacity Entitlement of 2,400 acre-feet is not subject to increase under this Agreement.

3.1.4 **LIBERTY's Storage Capacity Entitlement.** LIBERTY's annual entitlement to the Effluent Recharge Project's storage capacity shall be the Effluent Recharge Project's total storage capacity minus the CAWCD Storage Capacity ("LIBERTY's Storage Capacity Entitlement").

3.1.5 **Ownership of the Effluent Recharge Project.** LIBERTY shall own and operate the Effluent Recharge Project, including any and all land on which the Project is located. The Parties understand and agree that the Project site shall include additional land for location of offices and/or other buildings that may be constructed by LIBERTY for use in operation of the Effluent Recharge Project or other business purposes.

3.1.6 **Execution of Effluent Recharge Project Operating Agreement.** Within sixty (60) days of ADWR's issuance of a final underground storage facility permit for the Effluent Recharge Project, the Parties shall execute the Effluent Recharge Project Operating Agreement, which shall be substantially in the form as Exhibit A, attached hereto. The Effluent Recharge Project Operating Agreement is subject to the terms and conditions set forth in this Agreement and to the extent any conflict exists between this Agreement and the Effluent Recharge Project Operating Agreement, the terms of this Agreement shall take precedence and control. Further, in the event that this Development Agreement is terminated for any reason, the Operating Agreement also will terminate and will no longer be in force or effect between the Parties.

3.1.7 **Ordinary O&M Costs.** Each Party will be responsible for annual costs for Ordinary O&M Costs at the Effluent Recharge Project based on each Party's proportionate share of storage capacity utilized during the year divided by the total Effluent delivered to the Effluent Recharge Project. By way of example only, if 3,000 acre-feet of Effluent is delivered to the Effluent Recharge Project in a given year, and CAWCD uses 2,400 acre-feet of storage capacity and LIBERTY uses 600 acre-feet of storage capacity, then CAWCD shall be responsible for 80% (2400/3000) of the Ordinary O&M Costs and LIBERTY shall be responsible for 20% (600/3000) of the Ordinary O&M Costs. At least six months before the first delivery of Effluent to the Effluent Recharge Project, LIBERTY and CAWCD will jointly develop an estimate of the total annual Ordinary O&M Costs and an estimate of CAWCD's share of annual Ordinary O&M Costs based on CAWCD's proportionate share of storage capacity to be utilized during the following year. The Parties anticipate that the estimated cost will initially be in the range of $20 per acre foot. On or before November 15th of the initial year of delivery of Effluent to the Effluent Recharge Project and each year thereafter, LIBERTY shall provide to CAWCD an estimate of the total annual Ordinary O&M Costs and an estimate of CAWCD's share of annual Ordinary O&M Costs based on CAWCD's proportionate share of storage capacity to be utilized during the following year. On or before the 15th of each month, LIBERTY will bill CAWCD one-twelfth (1/12) of the annual estimated Ordinary O&M Costs. CAWCD shall pay LIBERTY within thirty days of receipt of the bill. Differences between

actual Ordinary O&M Costs and estimated O&M Costs shall be determined by LIBERTY and shall be adjusted in the next succeeding annual estimate of Ordinary O&M Costs.

3.1.8 **Extraordinary O&M Costs.** LIBERTY and CAWCD shall share Extraordinary O&M Costs related to the Effluent Recharge Project based on each Party's annual entitlement to the Effluent Recharge Project's storage capacity. To the extent practicable, before LIBERTY incurs any Extraordinary O&M Costs, the Parties shall meet and confer regarding the need to incur such costs.

3.1.9 **Effluent Pipeline Capacity Reservation.** LIBERTY owns and operates the Effluent Pipeline that conveys or will convey Effluent produced at PVWRF to the Effluent Recharge Project for reuse and discharge. CAWCD seeks dedicated capacity in the Effluent Pipeline for transport of the Effluent Entitlement to the Effluent Recharge Facility. Subject to any adjustment made pursuant to Section 3.1.2.3.2 and subject to CAWCD's compliance with its obligations under this Agreement, LIBERTY hereby grants CAWCD an entitlement to use that capacity of the Effluent Pipeline sufficient to transport 2,400 acre-feet of Effluent to the Project during the course of a year. LIBERTY grants CAWCD this Effluent Pipeline Capacity Reservation for a period of 100 years commencing on the date of issuance of the Notice of Substantial Completion. CAWCD shall pay LIBERTY $1,313,100 for the Effluent Pipeline Capacity Reservation. The amount due under this Section 3.1.9 shall be due and payable by CAWCD to LIBERTY when the total amount of Escrow Funds withdrawn from the Escrow Account equals or exceeds $4,000,000. Upon such payment, LIBERTY shall reserve to CAWCD the necessary capacity in the Effluent Pipeline sufficient to transport 2,400 acre-feet of Effluent per annum to the Effluent Recharge Project.

3.1.10 **Effluent Delivery Charge.** CAWCD shall pay LIBERTY a per acre-foot delivery charge for transportation, delivery and disposal of CAWCD's Effluent Entitlement through the Effluent Pipeline to the Effluent Recharge Project. Such charge will be based on LIBERTY's actual cost for delivery and disposal, including pumping energy and pipeline operation and maintenance costs for Ordinary O&M. The per acre-foot delivery charge is estimated to be $27.16 per acre foot of Effluent delivered to the Effluent Recharge Project based on an actual historical (prior year) cost for power of $19.16 per acre-foot and an agreed upon pipeline maintenance fee of $8.00 per acre-foot. LIBERTY shall bill CAWCD on a monthly basis for such charges subject to reconciliation for actual power costs at the end of the year. The pipeline maintenance fee was agreed by the Parties to be $8.00 per acre-foot for 2011 with adjustments for CPI-U in future years. Using 2013 as the base year, the billed pipeline maintenance fee for future years will be based on the CPI-U index as of December 31 of the previous year using December 31, 2013 as the base year with an annual true-up to be completed using the actual CPI-U at December 31 of the current year completed as the measuring factor. CAWCD shall be responsible for its pro-rata share of Extraordinary O&M Costs of the Effluent Pipeline. CAWCD's pro-rata share of Extraordinary O&M Costs of the Effluent Pipeline shall be determined by dividing CAWCD's entitlement to use the Effluent Pipeline Capacity by the total Effluent Pipeline Capacity.

3.1.11 **Maintenance of Insurance for Effluent Recharge Project and Physical Damage.**

3.1.11.1 **Maintenance of Insurance for Effluent Recharge Project.** While this Agreement shall remain in effect, LIBERTY shall obtain and cause to be maintained, with financially sound and reputable insurers, property and liability insurance, or its equivalent, with respect to the Effluent Recharge Project (including all improvements now existing or hereafter erected as a part thereof), or any substitute or replacement facility, against all losses, hazards, casualties, liabilities and contingencies as customarily carried or maintained by public services corporations of established reputation engaged in a similar business. The cost of such insurance is an operating cost of the Effluent Recharge Project and shall be included as a part of Ordinary O&M Costs as defined in Section 1.23.

3.1.11.2 **Physical Damage**. In the event of any physical damage to the Effluent Recharge Project or physical loss of the Effluent Recharge Project (collectively, "Physical Damage") that will or is reasonably likely to prevent delivery of CAWCD's Effluent Entitlement, LIBERTY shall give immediate written notice of the same to its insurance carrier and to CAWCD. Subject to the terms and conditions in this paragraph, LIBERTY shall pursue an insurance claim relating to such Physical Damage and LIBERTY shall promptly commence and diligently prosecute to completion the repair and restoration of the Effluent Recharge Project as nearly as possible to the condition of the Effluent Recharge Project immediately prior to the Physical Damage (a "Restoration"). LIBERTY agrees to dedicate all insurance proceeds associated with any Physical Damage to the Restoration of the Effluent Recharge Project. If the insurance proceeds are insufficient to cover 100% of the costs of Restoration, then LIBERTY and CAWCD shall pay those costs of Restoration not covered by the insurance proceeds in proportion to each Party's annual entitlement to the Effluent Recharge Project's storage capacity. At its discretion, LIBERTY may construct a substitute facility at a new location; provided, however, that in such event LIBERTY shall satisfy CAWCD's Effluent Entitlement from such substitute facility on the same terms and conditions as set forth in this Agreement. LIBERTY currently maintains replacement cost property insurance. LIBERTY shall notify CAWCD in writing, if at any time during the term of this Agreement, it will no longer maintain replacement cost property insurance. In such case, CAWCD and LIBERTY shall negotiate in good faith an amendment to this Section 3.1.11.2 addressing how the Parties shall address the risk of Physical Damage and share the costs of any Restoration. If Physical Damage occurs during the term of this Agreement at a point in time where the Parties mutually determine that it would be economically infeasible to rebuild or restore the Effluent Recharge Project, the Parties agree to negotiate in good faith on an alternative resolution.

3.1.12 **Condemnation**. LIBERTY shall promptly notify CAWCD in writing of the actual or threatened commencement of any proceeding to acquire the Effluent Recharge Project or any substitute or replacement facility through condemnation or eminent domain (collectively, "Condemnation"), and shall deliver to CAWCD copies of any and all papers served in connection with such proceedings. If the Effluent Recharge Project or any portion thereof (including any substitute or replacement facility) is taken through Condemnation, LIBERTY agrees to dedicate all proceeds of the Condemnation relating to the Effluent Recharge Project towards the construction of a substitute facility under this Agreement. If the Condemnation proceeds are insufficient to cover 100% of the costs of constructing a substitute facility, then LIBERTY and CAWCD, in their discretion, may pay those costs not covered by the Condemnation proceeds in proportion to each Party's annual entitlement to the Effluent Recharge

Project's storage capacity. In the event that Liberty opts to pay additional capital costs for a replacement facility, then the Parties agree to negotiate a revised Effluent Delivery Charge under Section 3.1.10 to account for such additional capital costs. If either CAWCD or LPSCO opts not to pay for such additional costs of a substitute facility, then the other party may opt to pay the entire amount of such additional costs. If the Parties decide not to build a substitute facility, then the Condemnation proceeds relating to the Effluent Recharge Project shall be used to reimburse CAWCD for its initial investment of $6,113,100 as adjusted for inflation and as pro-rated based on the use of the Effluent Recharge Project as measured by the total amount of CAWCD's Effluent Entitlement delivered to the Project as of the sale date divided by 240,000 acre-feet of Effluent. Any Condemnation proceeds remaining after repayment of CAWCD's pro-rated investment shall be distributed equally to LIBERTY and CAWCD. CAWCD shall be entitled to the Condemnation proceeds subject to the condition that such payment must be rate-base neutral for LIBERTY and eliminate any Contributions in Aid of Construction on LIBERTY's utility accounts associated with the Effluent Recharge Project for utility ratemaking purposes. As used in this Agreement, the term "Condemnation" shall mean any taking, whether full, partial, permanent or temporary, under the power of eminent domain or any similar power, and any transfer in lieu or in settlement of the assertion of any such right or the threat of such assertion. In the event that a condemning authority condemns all of the assets of LIBERTY, then LIBERTY shall use commercially reasonable efforts to require the condemning authority to assume the obligations of LIBERTY under this Agreement.

ARTICLE 4

EFFLUENT DISPOSAL AGREEMENT

4.1 LIBERTY shall sell/dispose of and deliver to the Effluent Recharge Project the Effluent Entitlement, subject to the terms of this Agreement. This Effluent Disposal Agreement is subject to the following terms and conditions.

4.1.1 **CAWCD Effluent Entitlement; Right of First Refusal.**

4.1.1.1 Subject to CAWCD's obligations under this Agreement, LIBERTY hereby grants CAWCD an annual entitlement to 2,400 acre-feet of Effluent for a term of 100 years, commencing on the date of issuance of the Notice of Substantial Completion of the Effluent Recharge Project, subject to any adjustments pursuant to Sections 3.1.2.3.2 and 4.1.7 and subject to Section 4.1.6. Subject to the terms and conditions of this Agreement, throughout this 100-year term, LIBERTY shall deliver the Effluent Entitlement each year to the Delivery Point.

4.1.1.2 LIBERTY agrees to grant CAWCD a right of first refusal to acquire any available Effluent in excess of the Effluent Entitlement proposed to be sold to a water customer outside of LIBERTY's CC&N for use or reuse on the same terms offered or agreed to by such water customer. LIBERTY further agrees that it will not actively market Effluent from PVWRF for sale outside of its CC&N, nor will it sell Effluent from PVWRF to a water user outside of LIBERTY's CC&N for underground storage purposes.

4.1.2 **Metering Device.** LIBERTY shall install a metering device ("Metering Device") to measure the quantity of Effluent delivered to the Delivery Point. The Metering Device shall be the basis for determining whether LIBERTY has met its obligation to deliver the Effluent Entitlement in any year during the term of this Agreement. The Metering Device shall be of a design and type mutually acceptable to LIBERTY and CAWCD. LIBERTY shall calibrate the metering device no less frequently than once every year. Any and all costs for the Metering Device shall be included as part of Development Costs in Section 3.1.2.3 above.

4.1.3 **CAWCD Payment Obligations.** In consideration of the disposal and delivery of the Effluent Entitlement from LIBERTY to the Effluent Recharge Project, CAWCD's Storage Capacity Entitlement and the Effluent Pipeline Capacity Reservation, CAWCD shall make the following payments:

4.1.3.1 The $4,800,000 to be paid by CAWCD under Section 3.1.2 above;

4.1.3.2 The cost associated with the Effluent Pipeline Capacity Reservation as provided in Section 3.1.9 above;

4.1.3.3 The per acre-foot delivery charges as provided in Section 3.1.10 above; and

4.1.3.4 The Ordinary O&M Costs and Extraordinary O&M Costs as provided in Sections 3.1.7 and 3.1.8 above.

4.1.4 **Replacement or Expansion of PVWRF.** LIBERTY shall operate, maintain, repair and replace PVWRF in compliance with all applicable regulatory requirements. In the event that PVWRF is replaced with another wastewater treatment facility ("Replacement Facility") or LIBERTY expands PVWRF so that it has additional capacity, then the provisions of the Effluent Disposal Agreement set forth herein shall be deemed to include the Effluent produced from either the Replacement Facility or the expanded PVWRF. LIBERTY shall install, operate, and maintain any Replacement Facility constructed at any location other than the PVWRF in such manner that the installation, operation, and maintenance of such new plant will not impair the ability of LIBERTY to sell and deliver 2,400 acre-feet of Effluent annually to the Effluent Recharge Project, regardless of whether the Effluent is produced at PVWRF or the Replacement Facility, subject to any and all regulatory obligations and/or requirements of LIBERTY.

4.1.5 **Permits and Authorizations.** LIBERTY shall be solely responsible for securing and maintaining in force and effect any and all permits and authorizations required by law for the operation of the Effluent Recharge Project and the delivery of Effluent to CAWCD at the Delivery Point.

4.1.6 **Priority.** During the term of this Agreement, as defined in Section 4.1.1.1, and as set forth in this Section 4.1.6, CAWCD's right to the Effluent Entitlement pursuant to the Effluent Disposal Agreement shall have priority over all other sales of Effluent by LIBERTY, except for the obligation(s) of LIBERTY to provide Effluent (i) to any current customer of LIBERTY which is receiving Effluent as of the Effective Date of this Agreement; or

(ii) to any entity which has a contract with LIBERTY to purchase Effluent as of the Effective Date of this Agreement. Except as provided in the preceding sentence, LIBERTY will not (a) commence or agree to commence delivery of Effluent to any current or future customer of LIBERTY; or (b) enter into any contract to deliver Effluent to any entity if such delivery of Effluent will impair, or is reasonably likely to impair, LIBERTY's ability to deliver the full Effluent Entitlement to CAWCD hereunder; provided, however, that LIBERTY may deliver Effluent to any current customer not receiving Effluent as of the Effective Date of this Agreement or future customer if the ACC issues a final order requiring LIBERTY to deliver Effluent to such customer. Provided, further, that delivery of Effluent pursuant to such a final order of the ACC shall not be deemed a breach of this Agreement. LIBERTY agrees that it will not initiate any proceeding at the ACC requesting an order from the ACC requiring LIBERTY to deliver Effluent to any current or future customer, including any entity seeking to contract with LIBERTY to acquire Effluent. In the event that any proceeding or action is undertaken to request or require that LIBERTY deliver Effluent to any current or future customer, which would impair LIBERTY's ability to deliver the full Effluent Entitlement to CAWCD, LIBERTY agrees that it will take reasonable efforts to defend CAWCD's right to the Effluent Entitlement under this Agreement. In that event, CAWCD also shall intervene in such proceeding and defend the Effluent Entitlement.

4.1.7 **Failure to Deliver Full Effluent Entitlement.**

4.1.7.1 **Make Up of Shortfall; Transfer of Long-Term Storage Credits.** If, in any year during the term of the Effluent Disposal Agreement, LIBERTY fails to deliver the full Effluent Entitlement, then LIBERTY shall make up the shortfall in the following year by delivering the full Effluent Entitlement for that year plus an amount equal to 103% of the shortfall from the previous year. For each acre-foot of Effluent delivered under a shortfall pursuant to this Section 4.1.7.1, CAWCD shall pay LIBERTY the same rate that it would have paid LIBERTY for storage at the Effluent Recharge Project in the year of the shortfall, as defined in Sections 3.1.7 and 3.1.10. If LIBERTY is unable to deliver some or all of the additional Effluent to fully offset the shortfall volume in the year following the shortfall year, then LIBERTY shall transfer Long-Term Storage Credits from LIBERTY's Long-Term Storage Account, or LIBERTY may acquire Long-Term Storage Credits to transfer to CAWCD in an amount equal to 103% of the shortfall. If LIBERTY is unable to deliver some or all of the additional Effluent and/or does not transfer Long-Term Storage Credits to fully offset the shortfall, then the shortfall will be addressed pursuant to Section 4.1.7.2. For each acre-foot of Long-Term Storage Credits transferred pursuant to this Section 4.1.7.1, CAWCD shall pay LIBERTY the same rate that it would have paid LIBERTY for storage at the Effluent Recharge Project in the year of the shortfall, as defined in Sections 3.1.7 and 3.1.10.

4.1.7.2 **Five-Year Shortfall Review.** Within 90 days of the fifth anniversary of the date of the Notice of Substantial Completion, and every five years thereafter, the Parties shall meet and review (i) the volume of the Effluent Entitlement delivered during the preceding five years; (ii) the volume of any shortfall in the delivery of the Effluent Entitlement during the previous five years; (iii) the cause of any shortfall in the delivery of the Effluent Entitlement; and (iv) the volume of any Long Term Storage Credits transferred to cover any shortfall. As part of this five year review process, the Parties also shall determine whether and to what extent CAWCD may be entitled to a refund or offset for its capital investment based on

delivery of Effluent and/or transfer of Long-Term Storage Credits pursuant to Section 4.1.7.1 above during each five year period. Under this Agreement, CAWCD is entitled to 12,000 acre-feet of Effluent and/or Long-Term Storage Credits pursuant to Section 4.1.7.1, during each five year period of this Agreement. Within 90 days of the fifth anniversary of the Notice of Substantial Completion, and every five years thereafter, the Parties shall meet and determine the total amount of Effluent and Long-Term Storage Credits delivered during the prior five years. If there is a shortfall in the amount of Effluent and/or Long-Term Storage Credits delivered during that five year period (*i.e.*, if LIBERTY has delivered less than 12,000 acre-feet of Effluent and/or Long-Term Storage Credits to CAWCD), then the Parties shall determine whether LIBERTY can reasonably be expected to make up that shortfall during the next five year period. If the Parties determine that LIBERTY cannot reasonably make up that shortfall during the next five year period, then CAWCD shall be entitled to a refund for the shortfall based on the following formula: (acre-feet of shortfall)/240,000 x $6,113,100 (as adjusted for depreciation of the Effluent Pipeline) equals refund amount. The refund amount shall be adjusted for inflation using the CPI-U index. For illustration purposes only, if during the years 2020-2025, LIBERTY delivers 10,000 acre-feet of Effluent and no Long-Term Storage Credits, resulting in a 2,000 acre-foot shortfall, the Parties shall assess a potential refund as part of the five year review in 2026. If the Parties determine that LIBERTY cannot reasonably be expected to make up that 2,000 acre-foot shortfall during the 2026-2030 period, then CAWCD shall be entitled to a refund for the period of 2020-2025 calculated as follows: 2,000/240,000 = .0083; .0083 x $6,113,100 (as adjusted for depreciation of the Effluent Pipeline) = $50,739 (adjusted for inflation using the CPI-U index). Depreciation shall be calculated based on the CAWCD investment price for the Effluent Pipeline Capacity Reservation of $1,313,100 The Parties understand and agree that any such refund shall be offset against CAWCD's future payment obligations during the next succeeding five-year period under this Agreement; provided, however, that if CAWCD's future payment obligations during the next succeeding five-year period are projected to be insufficient to cover the amount of the refund due, then LIBERTY shall pay CAWCD the amount of the refund that cannot be offset with such future payment obligations.

4.1.8 **Maintenance of Insurance for PVWRF and Physical Damage.**

4.1.8.1 **Maintenance of Insurance for PVWRF.** While this Agreement shall remain in effect, LIBERTY shall obtain and cause to be maintained, with financially sound and reputable insurers, property and liability insurance, or its equivalent, with respect to the PVWRF (including all improvements now existing or hereafter erected as a part thereof), or any substitute or replacement facility, against all losses, hazards, casualties, liabilities and contingencies as customarily carried or maintained by public services corporations of established reputation engaged in a similar business.

4.1.8.2. **PVWRF Physical Damage.** In the event of any physical damage to the PVWRF or physical loss of the PVWRF ("PVWRF Physical Damage") that will or is reasonably likely to prevent delivery of CAWCD's Effluent Entitlement, LIBERTY shall give immediate written notice of the same to its insurance carrier and to CAWCD. In the event of PVWRF Physical Damage, at its discretion LIBERTY may, but shall not be required to: (i) restore or reconstruct the PVWRF as nearly as possible to the condition of the PVWRF immediately prior to the Physical Damage; or (ii) construct a substitute facility at a new location in such a manner as to permit LIBERTY to satisfy CAWCD's Effluent Entitlement from such

substitute facility on the same terms and conditions as set forth in this Agreement. If LIBERTY elects to neither restore the PVWRF nor construct a substitute facility, then LIBERTY shall use commercially reasonable efforts to deliver Effluent from another facility owned by LIBERTY, if any, to satisfy CAWCD's Effluent Entitlement. If LIBERTY is unable to satisfy CAWCD's Effluent Entitlement on the same terms and conditions as set forth in the Agreement after PVWRF Physical Damage, the Parties agree to sell the Effluent Recharge Project, and CAWCD shall be entitled to a portion of the proceeds from the sale of the Effluent Recharge Project, subject to regulatory requirements, approvals, decisions and/or orders, including any regulatory decisions issued by the ACC. Subject to any such regulatory decisions, CAWCD shall be entitled to a portion of the proceeds of the sale of the Effluent Recharge Project subject to the condition that such payment must be rate-base neutral for LIBERTY and eliminate any Contributions in Aid of Construction on LIBERTY's utility accounts associated with the Project for utility ratemaking purposes. In the event of such sale, this Agreement shall be terminated. The sale proceeds shall be distributed as follows. First, the sale proceeds shall be used to reimburse CAWCD for its initial investment of $6,113,100 as adjusted for inflation and as pro-rated based on the use of the Effluent Recharge Project as measured by the total amount of CAWCD's Effluent Entitlement delivered to the Project as of the sale date divided by 240,000 acre-feet of Effluent. Second, any sale proceeds remaining after repayment of CAWCD's pro-rated investment shall be distributed equally to LIBERTY and CAWCD.

4.1.9 **Condemnation**. LIBERTY shall promptly notify CAWCD in writing of the actual or threatened commencement of any proceeding to acquire the PVWRF or any substitute or replacement facility through condemnation or eminent domain, and shall deliver to CAWCD copies of any and all papers served in connection with such proceedings. If condemnation of the PVWRF or replacement facility prevents LIBERTY from satisfying its obligations under this Agreement, the Parties agree to sell the Effluent Recharge Project, and CAWCD shall be entitled to a portion of the proceeds from the sale of the Effluent Recharge Project, subject to regulatory requirements, approvals, decisions and/or orders, including any regulatory decisions issued by the ACC. Subject to any such regulatory decisions, CAWCD shall be entitled to a portion of the proceeds of the sale of the Effluent Recharge Project subject to the condition that such payment must be rate-base neutral for LIBERTY and eliminate any Contributions in Aid of Construction on LIBERTY's utility accounts associated with the Project for utility ratemaking purposes. In the event of such sale, this Agreement shall be terminated. The sale proceeds shall be distributed as follows. First, the sale proceeds shall be used to reimburse CAWCD for its initial investment of $6,113,100 as adjusted for inflation and as pro-rated based on the use of the Effluent Recharge Project as measured by the total amount of CAWCD's Effluent Entitlement delivered to the Project as of the sale date divided by 240,000 acre-feet of Effluent. Second, any sale proceeds remaining after repayment of CAWCD's pro-rated investment shall be distributed equally to LIBERTY and CAWCD. In the event that a condemning authority condemns all of the assets of LIBERTY, then LIBERTY shall use commercially reasonable efforts to require the condemning authority to assume the obligations of LIBERTY under this Agreement.

ARTICLE 5

AGREEMENT FOR PURCHASE OF LONG-TERM STORAGE CREDITS

5.1 Under this Agreement, LIBERTY and CAWCD hereby agree to the following terms and conditions for an Agreement For Purchase of Long-Term Storage Credits:

5.1.1 **Intent of the Parties.** CAWCD desires to purchase Long-Term Storage Credits developed by LIBERTY pursuant to A.R.S., Title 46, Chapter 3.1, for the benefit of member lands and member service areas. LIBERTY has authority and is willing to sell and transfer certain Long-Term Storage Credits in the amounts and for the prices specified below.

5.1.2 **Generation and Sale of Long-Term Storage Credits.** Upon construction and operation of the Effluent Recharge Project, LIBERTY agrees to deliver and dispose of treated wastewater discharged from PVWRF that is not reused by LIBERTY customers within or outside its CC&N service area, or delivered to CAWCD pursuant to this Agreement, to the Effluent Recharge Project. LIBERTY agrees to store such treated wastewater using LIBERTY's Storage Capacity Entitlement to generate Long-Term Storage Credits as authorized by applicable law. LIBERTY covenants that all of the Long-Term Storage Credits to be sold pursuant to this Agreement will be accrued through storage of Effluent at the Effluent Recharge Project, unless otherwise agreed by the Parties. It is the intent of the Parties that all Long-Term Storage Credits purchased and sold under this Agreement shall retain the identity of the source of water used to generate such Long-Term Storage Credits.

5.1.2.1 The Long-Term Storage Credits to be sold by LIBERTY under this Agreement will be from LIBERTY's Long-Term Storage Account. The Long-Term Storage Credits to be sold by LIBERTY will be stored at the Effluent Recharge Project pursuant to an ADWR Facility Permit to be obtained by LIBERTY for the Effluent Recharge Project, such facility being located in the Phoenix Active Management Area.

5.1.2.2 The Long-Term Storage Credits to be sold by LIBERTY will be stored pursuant to ADWR Water Storage Permit No. 73-572386.0200.

5.1.2.3 The source of water used to generate the Long-Term Storage Credits to be sold by LIBERTY will be Effluent.

5.1.3 **Purchase of Long-Term Storage Credits.** LIBERTY agrees to sell to CAWCD and CAWCD agrees to purchase from LIBERTY all Long-Term Storage Credits accrued by LIBERTY at the Effluent Recharge Project that are not required for LIBERTY's own water supply purposes by the ACC or any other state, federal or local entity with jurisdiction over LIBERTY. In the event that LIBERTY is prohibited by law from accruing Long-Term Storage Credits using Effluent as a source supply, then LIBERTY shall sell Effluent to CAWCD and CAWCD shall buy Effluent from LIBERTY at the price derived from the formula set forth in Section 5.1.5 below. LIBERTY shall be responsible for storing the Effluent at no additional charge and the Effluent price will be based on the water credits earned. LIBERTY warrants that it will have good and marketable title to the Long-Term Storage Credits that are the subject of this Agreement and agrees to convey marketable title to such Long-Term Storage Credits free and clear of all liens and encumbrances. LIBERTY shall warrant and defend title against all persons whomsoever.

5.1.4 **Term.** The term of this Agreement for Purchase of Long-term Storage Credits will be 100 years, commencing on the date of the issuance of the Notice of Substantial Completion.

5.1.5 **Purchase Price.** The purchase price for Long-Term Storage Credits in excess of CAWCD's Effluent Entitlement shall be based on the standard formula that LIBERTY and CAWCD previously used for Effluent credit purchases. The per acre-foot price for Long-Term Storage Credits in 2013 is $138.00. For example, the credit purchase price using 2013 CAWCD water rates is calculated as follows: (CAP M&I Recharge Delivery Rate + Recharge O&M) / 0.99 x 0.9 = ($144 + 8) / 0.99 x 0.9 = $138/acre-foot.

5.1.6 **Price Adjustment.** The purchase price of Long-Term Storage Credits after 2013 will be escalated annually by the CPI-U index, which is currently estimated to be approximately 3% annually. Any Long-Term Storage Credits stored or purchased by CAWCD from LIBERTY pursuant to this Agreement shall be used to meet replenishment obligations including establishment and maintenance of the replenishment reserve. Every five years, either party may request that the Long-Term Storage Credit purchase price identified under this section be adjusted. The rate adjustment would be negotiated and could take into consideration the sale price of Long-Term Storage Credits in the Phoenix Active Management Area during the previous 18 months or by an alternative method that is mutually agreeable to the Parties.

5.1.7 **Long-Term Storage Credit Transfer Form.** For each year of this Agreement during which CAWCD purchases Long-Term Storage Credits from LIBERTY, LIBERTY and CAWCD shall complete, sign and deliver the Long-Term Storage Credit Transfer Form as prescribed below to evidence the transfer of Long-Term Storage Credits pursuant to this Agreement. A copy of the Long-Term Storage Credit Transfer Form is attached as Exhibit B to this Agreement. The Parties understand that the necessary form may change from time to time during the term of this Agreement, and the Parties agree to execute the necessary transfer forms as appropriate during the term of this Agreement. The Parties shall cooperate to take such further actions and execute such further documents as may be determined by either party to be necessary or advisable in order to complete the transfer of the Long-Term Storage Credits contemplated by this Agreement. Commencing on the one-year anniversary after the Effluent Recharge Project begins operations (the "Transfer Date"), CAWCD and LIBERTY shall complete, sign and deliver the Long-Term Storage Credit Transfer Form to evidence the transfer of Long-Term Storage Credits during that initial year of the Agreement. After LIBERTY has executed and delivered the Long-Term Storage Credit Transfer Form to CAWCD, CAWCD shall promptly deliver the fully executed Long-Term Storage Credit Transfer Form to ADWR. To evidence the transfer of Long-Term Storage Credits for each successive year of this Agreement, CAWCD and LIBERTY shall complete, sign and deliver the necessary Long-Term Storage Credit Transfer Form no later than the Transfer Date on each successive year of this Agreement.

5.1.8 **Completion of Delivery.** Delivery(ies) of the Long-Term Storage Credits to be transferred pursuant to this Agreement shall be deemed complete when ADWR notifies LIBERTY or CAWCD in writing that it has received and accepted the Long-Term Storage Credit Transfer Form(s) or as otherwise reflected in ADWR's records ("ADWR Acceptance"). CAWCD and LIBERTY shall cooperate with ADWR to facilitate completion of such transfer by ADWR.

5.1.9 **Timing of Payment.** For each year of this Agreement, CAWCD shall pay the amounts specified in Section 5.1.5 above no later than twenty (20) business days after ADWR Acceptance of credits transferred pursuant to this Agreement. In the event that ADWR Acceptance has not occurred within sixty (60) days after submission of the Long-Term Storage Credit Transfer Form(s), either CAWCD or LIBERTY may void the transfer transaction for that year. In that event, the Parties understand and agree that neither Party will be in violation or breach of this Agreement. In the event that the Long-Term Storage Credits are transferred out of LIBERTY's account by ADWR, but CAWCD is unable to obtain approval, for any reason, of a transfer of the credits into CAGRD's Account(s), CAWCD shall cooperate with and assist LIBERTY in efforts to obtain approval of a transfer of the Long-Term Storage Credits back into LIBERTY's Long-Term Storage Account.

5.1.10 **Rejection or Invalidation of Transfer.** If ADWR, pursuant to A.R.S. § 45-854.01(C), rejects or invalidates any transfer or assignment of Long-Term Storage Credits made hereunder before CAWCD has paid for such Long-Term Storage Credits, CAWCD shall not be obligated to pay for the number of Long-Term Storage Credits affected by such rejection or invalidation. If such rejection or invalidation occurs after payment has been made by CAWCD, LIBERTY shall refund an amount equal to the number of Long-Term Storage Credits affected by such rejection or invalidation times the price per acre-foot for the affected Long-Term Storage Credits, as such prices are established above. Before such refund is payable, CAWCD shall exhaust all administrative remedies to achieve transfer or assignment of the Long Term Storage Credits unless the Parties mutually agree otherwise. CAWCD shall pursue such administrative remedies for transfer or assignment of Long Term Storage Credits as a condition prerequisite to seeking any refunds under Section 4.1.7.2 above to the extent such Long Term Storage Credits impact any shortfall in the delivery of the Effluent Entitlement. Upon exhaustion of such administrative remedies, LIBERTY shall refund such amount within twenty (20) business days after either CAWCD or LIBERTY receives any notice of rejection or invalidation from ADWR. CAWCD shall transfer and assign back to LIBERTY the number of credits affected by any such rejection or invalidation. LIBERTY's obligation to refund any payments under this section shall expire thirty (30) days after ADWR has issued a non-appealable final agency decision approving the transfer and assignment of the Long-Term Storage Credits into CAGRD's Account(s).

ARTICLE 6

MISCELLANEOUS

6.1 **ACC Approval**. LIBERTY and CAWCD seek assurances from the ACC that LIBERTY has the right and authority to commit the Effluent Entitlement to CAWCD for 100 years as provided in this Agreement. In addition, CAWCD and LIBERTY seek assurances from the ACC that the mechanisms for establishing rates and rate adjustments for the Effluent Entitlement and purchase of Long-Term Storage Credits which will remain in effect during the 100-year term of this Agreement are in accordance with the ACC's rules, policies and decisions and the tariffs of LIBERTY. As a result, CAWCD seeks ACC approval of the Effluent Entitlement and ACC approval of the agreed upon rates and rate-adjustment mechanisms for

delivery and disposal of Effluent to the Effluent Recharge Project and purchase of Long-Term Storage Credits set forth in this Agreement between LIBERTY and CAWCD.

6.1.1 Upon execution of this Agreement, LIBERTY shall prepare (in consultation with CAWCD) and file an application with the ACC seeking approval of the Effluent Entitlement and the agreed upon rates and rate adjustment mechanisms for delivery and disposal of Effluent to the Effluent Recharge Project and purchase of Long-Term Storage Credits as set forth herein. In seeking ACC approval, the Parties will notify the ACC that upon CAWCD's payment of the amounts set forth above, any additional costs incurred by LIBERTY to deliver the Effluent Entitlement to the Effluent Recharge Project during the term of the Effluent Delivery Agreement shall be a utility expense subject to inclusion in future rate base or expenses in the event that the ACC issues a future decision modifying or changing the terms of the Effluent Delivery Agreement and resulting in LIBERTY incurring such additional costs to provide the Effluent Entitlement to CAWCD. In seeking ACC approval, the Parties pledge to support and defend any agreements submitted to the ACC for approval, including, but not limited to, appearing at hearings, providing testimony, and attending Open Meetings of the ACC. If the ACC fails to enter a final order that is satisfactory to both Parties, in their reasonable discretion, then either Party may cancel this Agreement by providing written notice of cancellation ("Notice of Cancellation") to the other Party within 30 days after the date of a final order of the ACC, and this Agreement (including the Effluent Disposal Agreement and the Agreement for Purchase of Long-Term Storage Credits) shall thereafter be of no further force or effect. In that event, any Escrow Funds shall be used to pay for any unpaid land acquisition, development, design and/or construction costs incurred and payable by LIBERTY as of the date of the Notice of Cancellation, and any remaining Escrow Funds shall be refunded to CAWCD within 30 days of the date of the Notice of Cancellation subject to a determination by the Parties that there are no outstanding land, development, design and/or construction costs due by LIBERTY. If either party elects to cancel this Agreement under this section and LIBERTY has purchased or contracted to purchase property for the Effluent Recharge Project as of the date of the Notice of Cancellation, then within 15 days of cancellation of this Agreement, LIBERTY shall transfer title to such property to CAWCD in the same condition of the property when it was purchased or contracted by LIBERTY.

6.1.2 In the event that the ACC does not issue a decision approving the Effluent Entitlement and the agreed upon rates for delivery and disposal of Effluent to the Effluent Recharge Project and purchase of Long-Term Storage Credits set forth in this Agreement between LIBERTY and CAWCD that is satisfactory to both Parties, in their reasonable discretion, then in lieu of cancelling the agreements pursuant to Section 6.1.1, the Parties may meet and confer to determine whether additional terms could be included in this Agreement to ensure that the benefits of the Effluent Entitlement and the Effluent Recharge Project for each of the Parties are achieved.

6.2 **Additional Documentation**. Each Party agrees to execute and record any additional documentation that the other may reasonably require to effectuate the intents and purposes of this Agreement.

6.3 **Effective Date**. This Agreement shall be effective upon the date first set forth above.

6.4 **Amendments**. This Agreement may be modified, amended or revoked only by the express written agreement of the Parties hereto.

6.5 **Interpretation**. This Agreement is governed by and must be construed and interpreted in accordance with and in reference to the laws of the State of Arizona, without regard to its conflicts of laws provisions. Any action to resolve any dispute regarding this Agreement shall be taken in a state court of competent jurisdiction located in Maricopa County, Arizona. The Parties agree to waive all rights to a jury trial.

6.6 **Waiver**. No delay in exercising any right or remedy shall constitute a waiver unless such right or remedy is waived in writing signed by the waiving Party. The waiver by either Party of a breach of any term, covenant, or condition in this Agreement shall not be deemed a waiver of any other term, covenant, or condition of this Agreement.

6.7 **Representations and Covenants.** CAWCD represents and covenants: (i) that it is fully authorized to enter into this Agreement under Title 48 of the Arizona statutes, and (ii) that CAWCD is statutorily authorized to enter a 100-year contract for purchase of Effluent and Long-Term Storage Credits under A.R.S. § 48-3772.

6.8 **Severability**. Any determination by any court of competent jurisdiction that any provision of this Agreement is invalid or unenforceable does not affect the validity or enforceability of any other provision of this Agreement. To the extent any provision of this Agreement is found to be invalid or unenforceable in the future, the Parties agree to negotiate in good faith an alternative and/or replacement provision in accordance with the original intent of the Parties under this Agreement.

6.9 **Future Regulations Prohibiting Recharge of Effluent.** Except as provided in Section 5.1.3 and so long as LIBERTY'S performance under Section 5.1.3 is allowed by law, if new laws or regulations are enacted that prohibit the underground storage of Effluent, or otherwise prevent LIBERTY from satisfying its obligations under this Agreement, the Parties agree to sell the Effluent Recharge Project (not including land containing any additional buildings that may be constructed by LIBERTY for other business purposes under Section 3.1.5 above, unless otherwise agreed by Liberty), and CAWCD shall be entitled to a portion of the proceeds from the sale of the Effluent Recharge Project, subject to regulatory requirements, approvals, decisions and/or orders, including any regulatory decisions issued by the ACC. Subject to any such regulatory decisions, CAWCD shall be entitled to a portion of the proceeds of the sale of the Effluent Recharge Project subject to the condition that such payment must be rate-base neutral for LIBERTY and eliminate any Contributions in Aid of Construction on LIBERTY's utility accounts associated with the Effluent Recharge Project for utility ratemaking purposes. In the event of such sale, this Agreement shall be terminated. The sale proceeds shall be distributed as follows. First, the sale proceeds shall be used to reimburse CAWCD for its initial investment of $6,113,100 as adjusted for inflation and as pro-rated based on the use of the Effluent Recharge Project as measured by the total amount of CAWCD's Effluent Entitlement delivered to the Project as of the sale date divided by 240,000 acre-feet of Effluent. Second, any sale proceeds remaining after repayment of CAWCD's pro-rated investment shall be distributed equally to LIBERTY and CAWCD.

6.10 **Uncontrollable Forces.** No Party shall be considered in default in the performance of any of its obligations under this Agreement (other than obligations of said Party to pay costs and expenses) when a failure of performance is due to Uncontrollable Forces. Under this Agreement, Uncontrollable Forces shall mean any cause beyond the control of the Party affected, including but not limited to, the failure or threatened failure of facilities, flood, earthquake, storm, fire, lightning, epidemic, war, riot, civil disturbance or disobedience, labor dispute, labor or material shortage, sabotage, restraint by court order or public authority, and action or non-action by or failure to obtain the necessary authorizations or approvals from any governmental agency or authority not a Party to this Agreement, which by exercise of due diligence such Party could not reasonably have been expected to avoid and which by exercise of due diligence it shall be unable to overcome. Nothing contained herein shall be construed to require a Party to settle any strike or labor dispute in which it is involved. Any Party rendered unable to fulfill any of its obligations under this Agreement by reason of an Uncontrollable Force shall give prompt written notice of such fact to the other Party.

6.11 **Time of the Essence.** Time is of the essence in the performance of this Agreement.

6.12 **Entire Agreement.** This Agreement, together with the Effluent Recharge Project Operating Agreement, constitute the entire agreement between the Parties and no understandings or obligations not expressly set forth in this Agreement are binding upon the Parties.

6.13 **Rules, Regulations and Amendment or Successor Statutes.** All references in this Agreement to the Arizona Revised Statutes include all rules and regulations promulgated by ADWR and/or the ACC under such statutes and all amendment statutes and successor statutes, rules, and regulations to such statutes, rules, and regulations.

6.14 **Notices.**

6.14.1 Notice, demand or request provided for in this Agreement shall be in writing and shall be deemed properly served, given or made if delivered in person or sent by registered or certified mail, postage prepaid, to the persons specified below:

CAWCD:

For delivery use: c/o General Manager
23636 N. 7th Street
Phoenix, AZ 85024

For U.S. Mail use: c/o General Manager
P.O Box 43020
Phoenix, AZ 85080-3020

LIBERTY:

For delivery and
For U.S. Mail use: c/o General Manager/President
Liberty Utilities

12725 W. Indian School Road, Suite D101
Avondale, AZ 85392

6.14.2 A Party may, at any time, by notice to the other Party, designate different or additional persons or different addresses for the giving of notices hereunder.

IN WITNESS WHEREOF, the Parties to this Agreement have executed this Agreement as of the date first set forth above.

CENTRAL ARIZONA WATER CONSERVATION DISTRICT

By: Pamela Rickard
President

Attest: Lisa A. Atkins
Secretary

LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.,
an Arizona corporation,

By: _____
Ian Robertson

Its: _____

8722538v1

David Bronicheski

AGREEMENT FOR DEVELOPMENT OF EFFLUENT RECHARGE FACILITY, EFFLUENT DISPOSAL AND PURCHASE AND SALE OF EFFLUENT

Exhibit A

Effluent Recharge Project Operating Agreement

EFFLUENT RECHARGE PROJECT OPERATING AGREEMENT

1. **PARTIES:**

This Effluent Recharge Project Operating Agreement ("Operating Agreement") is made this ____ day of _____, ("Effective Date"), between Liberty Utilities (Litchfield Park Water & Sewer) Corp. ("LIBERTY") and the Central Arizona Water Conservation District, a political subdivision of the State of Arizona, ("CAWCD").

2. **RECITALS:**

2.1 LIBERTY has developed, designed, permitted, and constructed the Effluent Recharge Project (the "Effluent Recharge Project"), an underground storage facility that is located in the Phoenix Active Management Area. More specifically, the Effluent Recharge Project is located within portions of Sections ___, Township __ North, Range __ West, G&SRB&M, Maricopa County, Arizona. (The Effluent Recharge Project is depicted on the site map attached as Figure 1.)

2.2 The Effluent Recharge Project is a constructed underground storage facility pursuant to Arizona Department of Water Resources ("ADWR") permit no. _____, consisting of approximately ___ acres of spreading basins.

2.3 ADWR has issued LIBERTY a Constructed Underground Storage Facility Permit for the Effluent Recharge Project. The Permit authorizes the underground storage of a maximum of ___ acre-feet of Effluent water per year at the Effluent Recharge Project.

2.4 The Effluent Recharge Project has been developed pursuant to the Agreement for Development of Effluent Recharge Facility, Effluent Disposal and Purchase and Sale of Effluent between LIBERTY and CAWCD ("Development Agreement"), dated ____.

2.5 As set forth in the Development Agreement, LIBERTY owns and operates the Effluent Recharge Project, including the Project's storage capacity and associated land. Subject to the terms and conditions set forth in the Development Agreement, CAWCD is entitled to 2,400 acre-feet of the Effluent Recharge Project's Storage Capacity.

3. **AGREEMENT:**

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are acknowledged, and intending to be legally bound, the Parties hereby agree to the following terms and conditions relating to operation of the Effluent Recharge Project. This Operating Agreement is subject to the terms and conditions set forth in the Development Agreement and to the extent any conflict exists between the Development Agreement and this Operating Agreement, the terms of the Development Agreement shall take precedence and control.

4. **DEFINITIONS:**

4.1 "ADWR" means the Arizona Department of Water Resources.

4.2 "CAWCD's Storage Capacity Entitlement" is as defined in Section 6.1 below.

4.3 "Delivery Point" means the delivery point interconnecting the Effluent Pipeline with the turnout for the Effluent Recharge Project.

4.4 "Development Agreement" means the Agreement for Development of Effluent Recharge Facility, Effluent Disposal and Purchase and Sale of Effluent between LIBERTY and CAWCD, dated ____.

4.5 "Effective Date" is the date set forth in the introductory paragraph of this Agreement on which this Agreement becomes effective.

4.6 "Effluent" means wastewater that is treated or reclaimed so that it is suitable for underground storage pursuant to A.R.S. Titles 45 and 49. Effluent includes treated wastewater that is produced now or in the future from the PVWRF, including any future expansions thereof, and Effluent produced at any other wastewater treatment plant that may be owned or controlled by LIBERTY.

4.7 "Effluent Pipeline" means the effluent pipeline from the Palm Valley Water Reclamation Facility ("PVWRF") to the boundary of the Effluent Recharge Project that conveys Effluent produced at PVWRF for reuse, disposal and discharge.

4.8 "Extraordinary O&M Costs" means those costs that are not Ordinary O&M Costs, including but not limited to non-routine, major maintenance, repair, replacement and capital improvement costs associated with the Effluent Recharge Project that exceed a cost of $75,000 as set forth in Sections 1.17 and 3.1.8 of the Development Agreement.

4.9 "LIBERTY's Storage Capacity Entitlement" is as defined in Section 6.2 below.

4.10 "Operating Agreement" means this Effluent Recharge Project Operating Agreement.

4.11 "Operating Work" means the furnishing of all labor, materials, equipment, expertise and other incidentals necessary or convenient to the operation, maintenance, monitoring, inspection, repair, replacement, improvement, reconstruction and retirement of the Effluent Recharge Project and to the administration of this Agreement.

4.12 "Ordinary O&M Costs" means the annual labor, overhead, and material costs for the routine operation, maintenance, monitoring and regulatory reporting at the Effluent Recharge Project as set forth in Sections 1.23 and 3.1.7 of the Development Agreement. For purposes of this Operating Agreement, the Parties agree that LIBERTY's overhead costs are equal to 10% of the Ordinary O&M Costs directly charged to this Effluent Recharge Project and shall not represent or include profit earned by LIBERTY, as set forth in paragraph 1.23 of the Development Agreement.

4.13 "Party/Parties" means one or both of the parties to this Operating Agreement.

4.14 "Permit" means the Constructed Underground Storage Facility Permit issued by ADWR for the Effluent Recharge Project, permit no. ____, including any amendments or modifications thereto.

4.15 "PVWRF" means the Palm Valley Wastewater Reclamation Facility owned and operated by LIBERTY at 14222 W. McDowell Road in Goodyear, Arizona.

4.16 "Storage Capacity Entitlement" means a Party's right or entitlement to use of the storage capacity of the Effluent Recharge Project.

4.17 "Uncontrollable Forces" means any cause beyond the control of the Party affected, including but not limited to, the failure or threatened failure of facilities, flood, earthquake, storm, fire, lightning, epidemic, war, riot, civil disturbance or disobedience, labor dispute, labor or material shortage, sabotage, restraint by court order or public authority, and action or non-action by or failure to obtain the necessary authorizations or approvals from any governmental agency or authority not a Party to this Agreement, which by exercise of due diligence such Party could not reasonably have been expected to avoid and which by exercise of due diligence it shall be unable to overcome. Nothing contained herein shall be construed to require a Party to settle any strike or labor dispute in which it is involved. Any Party rendered unable to fulfill any of its obligations under this Agreement by reason of an Uncontrollable Force shall give prompt written notice of such fact to the other Party and shall exercise due diligence to remove such inability.

5. TERM:

Subject to the terms and conditions set forth in the Development Agreement, this Operating Agreement shall become effective when executed by both Parties and shall remain in effect for a period of one-hundred (100) years from the Effective Date, unless sooner terminated pursuant to the provisions of this Operating Agreement or pursuant to the terms of the Development Agreement. In the event that the Development Agreement is terminated for any reason, this Operating Agreement also will terminate and will no longer be in force or effect between the Parties. CAWCD represents and covenants (i) that it is fully authorized to enter into this Agreement under Title 48 of the Arizona statutes, and (ii) that CAWCD is statutorily authorized to enter a 100-year contract for operation of the Effluent Recharge Project.

6. STORAGE CAPACITY ENTITLEMENTS:

6.1 Subject to the terms and conditions set forth in Article 3 of the Development Agreement, CAWCD's Storage Capacity Entitlement is equal to 2,400 acre-feet of annual storage capacity of the Effluent Recharge Project.

6.2 Subject to the terms and conditions set forth in Article 3 of the Development Agreement, LIBERTY's Storage Capacity Entitlement shall be the Effluent Recharge Project's total storage capacity minus the CAWCD Storage Capacity Entitlement.

6.3 Subject to the terms and conditions set forth in the Development Agreement, Storage Capacity Entitlement refers to a Party's right or entitlement to use of the Effluent Recharge Project to store Effluent at the Effluent Recharge Project pursuant to its ADWR water storage permit and subject to the terms of the Development Agreement.

7. WATER STORAGE PERMITS:

Each Party shall be responsible for obtaining its own water storage permit from ADWR authorizing it to store Effluent at the Effluent Recharge Project.

8. OPERATION OF THE EFFLUENT RECHARGE PROJECT:

8.1 The Operator of the Effluent Recharge Project shall be LIBERTY. As set forth in the Development Agreement, LIBERTY shall own and operate the Effluent Recharge Project, including any and all land on which the Project is located.

8.2 LIBERTY shall perform all Operating Work as determined by LIBERTY in its reasonable discretion.

8.3 LIBERTY shall collect, expend and account for all funds required for the Operating Work.

8.4 LIBERTY shall deliver Effluent from the Palm Valley Wastewater Reclamation Facility (or "Replacement Facility" as that term is defined in the Development Agreement) to the Effluent Recharge Project, in accordance with the terms and conditions set forth in the Development Agreement.

8.5 LIBERTY shall annually, upon request by CAWCD, or when otherwise deemed appropriate by LIBERTY, supply CAWCD with information on any matter, which may substantially affect the operation of the Effluent Recharge Project as determined by LIBERTY.

8.6 LIBERTY shall follow generally accepted accounting and engineering practices in performing the Operating Work.

8.7 LIBERTY shall at all times comply with the requirements of the Permit, and shall maintain the accuracy of all measuring devices associated with the Effluent Recharge Project within plus or minus 5%.

9. **STORAGE OF EFFLUENT:**

9.1 In accordance with Article 4 of the Development Agreement, LIBERTY shall deliver 2,400 acre-feet of Effluent annually to the Effluent Recharge Project through the Effluent Pipeline to the Effluent Recharge Project on behalf of CAWCD and LIBERTY shall store such Effluent utilizing CAWCD's Storage Capacity Entitlement, subject to the terms and conditions set forth in the Development Agreement.

9.2 In accordance with Article 5 of the Development Agreement, LIBERTY shall deliver and dispose of treated wastewater discharged from PVWRF that is not reused by LIBERTY customers within or outside LIBERTY's CC&N service area, or delivered to CAWCD pursuant to Article 4 of the Development Agreement and Section 9.1 above, to the Effluent Recharge Project and LIBERTY shall store such Effluent utilizing LIBERTY's Storage Capacity Entitlement.

10. **ORDINARY O&M COSTS:**

10.1 In accordance with Article 3 of the Development Agreement, each Party will be responsible for annual costs for Ordinary O&M Costs at the Effluent Recharge Project based on each Party's proportionate share of storage capacity utilized during the year divided by the total Effluent delivered to the Effluent Recharge Project. By way of example only, if 3,000 acre-feet of Effluent is delivered to the Effluent Recharge Project in a given year, and CAWCD uses 2,400 acre-feet of storage capacity and LIBERTY uses 600 acre-feet of storage capacity, then CAWCD shall be responsible for 80% (2400/3000) of the Ordinary O&M Costs and LIBERTY shall be responsible for 20% (600/3000) of the

Ordinary O&M Costs.

10.2 In accordance with Section 3.1.7 of the Development Agreement, at least six months before the first delivery of Effluent to the Effluent Recharge Project, LIBERTY and CAWCD will jointly develop an estimate of the total annual Ordinary O&M Costs and an estimate of CAWCD's share of annual Ordinary O&M Costs based on CAWCD's proportionate share of storage capacity to be utilized during the following year. The Parties anticipate that the estimated cost will initially be in the range of $20 per acre foot.

10.3 In accordance with Section 3.1.7 of the Development Agreement, on or before November 15th of the initial year of delivery of Effluent to the Effluent Recharge Project and each year thereafter, LIBERTY shall provide to CAWCD an estimate of the total annual Ordinary O&M Costs and an estimate of CAWCD's share of annual Ordinary O&M Costs based on CAWCD's proportionate share of storage capacity to be utilized during the following year. On or before the 15th of each month, LIBERTY will bill CAWCD one-twelfth (1/12) of the annual estimated Ordinary O&M Costs. CAWCD shall pay LIBERTY within thirty days of receipt of the bill. Differences between actual Ordinary O&M Costs and estimated O&M Costs shall be determined by LIBERTY and shall be adjusted in the next succeeding annual estimate of Ordinary O&M Costs.

11. EXTRAORDINARY O&M COSTS:

In accordance with Section 3.1.8 of the Development Agreement, LIBERTY and CAWCD shall share Extraordinary O&M Costs related to the Effluent Recharge Project based on each Party's proportionate share of the Effluent Recharge Project's storage capacity. To the extent practicable, before LIBERTY incurs any Extraordinary O&M Costs, the Parties shall meet and confer regarding the need to incur such costs as set forth in the Development Agreement.

12. WATER MEASUREMENT AND ACCOUNTING:

12.1 As the Project Operator, LIBERTY shall base its accounting for Effluent delivered to the Effluent Recharge Project on one or more of the following: (i) actual measurements, (ii) methods required by the Permit, and/or (iii) generally accepted accounting and engineering practices.

12.2 In accordance with Section 4.1.2 of the Development Agreement, LIBERTY shall install a metering device ("Metering Device") to measure the quantity of Effluent delivered to the Delivery Point. The Metering Device shall be the basis for determining whether LIBERTY has met its obligation to deliver the Effluent Entitlement in any year during the term of the Development Agreement. LIBERTY shall maintain the accuracy of the Metering Device within plus or minus 5% and shall calibrate the metering device no less frequently than once every year. Any and all costs for the Metering Device shall be included as part of Development Costs under the Development Agreement.

12.3 LIBERTY shall determine evaporation losses representative of the conditions at or near the Effluent Recharge Project using the method indicated in the Permit. Any other losses in the Effluent Recharge Project shall be calculated using generally accepted engineering practices. All losses at the Effluent Recharge Project shall be shared

between CAWCD and LIBERTY in proportion to the amount of storage capacity used by such Party during the month when the loss occurred.

12.4 Effluent delivered to the Effluent Recharge Project for storage, but which exits the facility other than by infiltration and evaporation, will be calculated using generally accepted engineering practices.

12.5 LIBERTY shall prepare a monthly water accounting report of Effluent stored at the Effluent Recharge Project for each Party. The report shall include the daily amount of Effluent delivered to the Effluent Recharge Project, the daily amount of Effluent stored, and the losses calculated as described in this Section.

12.6 LIBERTY shall provide ADWR with water accounting reports for the Effluent Recharge Project as required by the Permit.

12.7 The water accounting reports prepared pursuant to this Section shall be retained by LIBERTY for at least three (3) years and shall be made available for CAWCD's inspection upon written request.

12.8 LIBERTY will provide CAWCD a copy of the annual report submitted by LIBERTY to ADWR for the Effluent Recharge Project.

13. **WATER QUALITY:**

13.1 Each Party shall indemnify and hold harmless the other Party from liability associated with water quality degradation resulting from the indemnifying Party's use of the Effluent Recharge Project, due to the commingling of infiltrating Effluent with groundwater or with water flowing above or below the surface. Further, each Party waives any claim on its own behalf against the other Party for water quality degradation arising from such commingling, unless such claim is intended to enforce the indemnification provision of this Section.

13.2 LIBERTY shall not be responsible to CAWCD for curtailing or stopping flows into the Effluent Recharge Project in the event that LIBERTY determines that significant degradation of water quality in the underlying aquifer, which is likely to result in substantial liability, is occurring or may occur as a result of the introduction of water into the Effluent Recharge Project.

13.3 This Section shall survive expiration or termination of this Agreement, and shall remain in full force and effect.

14. **UNCONTROLLABLE FORCES:**

No Party shall be considered in default in the performance of any of its obligations under the Development Agreement or this Operating Agreement (other than obligations of said Party to pay costs end expenses) when a failure of performance is due to Uncontrollable Forces.

15. **GOVERNING LAW:**

This Agreement shall be governed by the laws of the State of Arizona.

16. **NOTICES:**

16.1 Notice, demand or request provided for in this Agreement shall be in writing and shall be deemed properly served, given or made if delivered in person or sent by registered or certified mail, postage prepaid, to the persons specified below:

CAWCD:

For delivery use: c/o General Manager
23636 N. 7th Street
Phoenix, AZ 85024

For U.S. Mail use: c/o General Manager
P.O Box 43020
Phoenix, AZ 85080-3020

LIBERTY:

For delivery and
For U.S. Mail use: c/o General Manager/President
Liberty Utilities
12725 W. Indian School Road, Suite D101
Avondale, AZ 85392

16.2 A Party may, at any time, by notice to the other Party, designate different or additional persons or different addresses for the giving of notices hereunder.

17. **THIRD PARTY BENEFICIARIES:**

This Agreement shall not be construed to create rights in, or to grant remedies to, any third party as a beneficiary of this Agreement or of any duty, obligation or undertaking established herein.

18. **WAIVER:**

The waiver by a Party of a breach of any term, covenant or condition in this Agreement shall not be deemed a waiver of any other term, covenant or condition or any subsequent breach of the same or any other term, covenant or condition of this Agreement.

19. **HEADINGS:**

Title and paragraph headings are for reference only and are not intended to modify or alter the substance of the underlying provisions.

20. **ENTIRE AGREEMENT:**

This Agreement, together with the Development Agreement, constitute the entire agreement among the Parties and no understandings or agreements not herein expressly set forth shall be binding upon them. This Agreement may not be modified or amended in any manner unless in writing and signed by the Parties.

21. **RULES, REGULATIONS AND AMENDMENT OR SUCCESSOR STATUTES:**

All references in this Agreement to the Arizona Revised Statutes include all rules and regulations promulgated by the Arizona Department of Water Resources under such

statutes and all amendment statutes and successor statutes, rules, and regulations to such statutes, rules, and regulations.

IN WITNESS WHEREOF, this Agreement is executed by the Parties hereto.

CENTRAL ARIZONA WATER CONSERVATION DISTRICT

By:_____

Attest:_____

LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.
an Arizona corporation,

By:_____

Its:_____

AGREEMENT FOR DEVELOPMENT OF EFFLUENT RECHARGE FACILITY, EFFLUENT DISPOSAL AND PURCHASE AND SALE OF EFFLUENT

Exhibit B

Long-Term Storage Credit Transfer Form

ADWR LONG-TERM STORAGE CREDIT TRANSFER FORM A.R.S. § 45-854.01

ARIZONA DEPARTMENT OF WATER RESOURCES
Water Management Section
3550 North Central Ave, Phoenix, Arizona 85012
Telephone (602) 771-8585
Fax (602) 771-8689

LONG-TERM STORAGE CREDIT TRANSFER FORM A.R.S. § 45-854.01

For Official Use Only
DATE RECEIVED: _____

[FOR SELLER]

_____
Name of Seller

_____
Contact Person/Telephone Number

_____
Mailing Address

_____
City/State/Zip

_____
Long-Term Storage Account No.

_____
Facility Permit Number (where source water was stored)

_____
Water Storage Permit Number (authority to store source water)

Number of long-term storage credits (in acre-feet) transferred by type(s) of water and year credits were earned.

Type: _____ acre-feet _____ year earned _____
Type: _____ acre-feet _____ year earned _____

[FOR BUYER]

_____
Name of Buyer

_____
Contact Person/Telephone Number

_____
Mailing Address

_____
City/State/Zip

_____
Long -Term Storage Account No. (if any)

If the transfer includes long-term storage credits earned from the storage of Central Arizona Project (CAP) water in an Active Management Area (AMA), please state:

1. The date of Buyer's formation (if Buyer is a legal entity): _____.

2. The amount of groundwater withdrawn by Buyer in the AMA during the calendar year that the credits were earned:

   _____.

   a. The groundwater right number(s) the Buyer withdrew the groundwater pursuant to:

      _____

Pursuant to A.R.S. § 45-854.01(C), the director of the Arizona Department of Water Resources may reject and invalidate any assignment of long-term storage credits in which the stored water would not have met the requirements for long-term storage credits as prescribed by A.R.S. § 45-852.01 if the assignee had stored the water.

The undersigned hereby certify, under penalty of perjury, that the information contained in this report is, to the best of their knowledge and belief, correct and complete and that they are authorized to sign on behalf of the party for whom their signature appears.

_____
Authorized Signature for Seller DATE

_____
Title

_____
Authorized Signature for Buyer DATE

_____
Title

Exhibit C

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

DOUG LITTLE – Chairman
BOB STUMP
BOB BURNS
TOM FORESE
ANDREW TOBIN

DOCKET NO. W-01445A-03-0559

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY FOR AN EXTENSION OF ITS CERTIFICATE OF CONVENIENCE AND NECESSITY AT CASA GRANDE, PINAL COUNTY, ARIZONA

Surrebuttal Testimony of Rita P. Maguire, Esq.

Remand Proceeding II

Docket W-01445A-03-0559

On behalf of Arizona Water Company

January 11, 2016

MAGUIRE, PEARCE & STOREY
A Professional Limited Liability Company

I. Introduction and Background.

Q. Please State your Name and Business Address.

A. My name is Rita P. Maguire. My business address is 2999 N. 44th Street, Suite 650, Phoenix, Arizona 85018.

Q. Are you the same Rita P. Maguire who previously provided testimony in this docket?

A. Yes, I am.

Q. Have you reviewed the rebuttal testimony of Steven Soriano (Hearing on Remand Proceeding II)?

A. Yes, I have.

Q. Are you adopting any of your earlier prefiled testimony at this time?

A. Yes, I am adopting all of my previous testimony in this matter.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to respond to certain statements made by Steven Soriano in his rebuttal testimony dated July 18, 2014.

Q. In his rebuttal testimony, Mr. Soriano states that "[a]n integrated utility recognizes that groundwater is a scarce resource and that the efficient use of reclaimed water for turf/landscape irrigation and recharge of the aquifer are critical to the long-term sustainable provision of water and wastewater services to its customers." Mr. Soriano then cites Robson's Pima Utility Company as an example of an integrated water company that recognizes groundwater is a scarce resource. (Soriano Rebuttal Testimony, p. 4, lines 25-27 and p. 5, lines 1 – 4.) Do you agree with this statement?

A. No, I do not agree with his statement. Unfortunately, the Pima Utility Company relies exclusively on groundwater for its initial water supply. (Soriano Rebuttal Testimony, p. 5,

line 4). This means that the effluent the company uses to recharge the aquifer replaces some, but not all, of the groundwater initially withdrawn to serve its customers. This business model does not stop the decline of the water table in an over-subscribed basin. The only way to ensure a long-term sustainable supply of water in a declining aquifer, which is the case in the Phoenix, Tucson and Pinal AMAs, is to import a new source of water for use in the basin. That is why the 1980 Groundwater Management Code and related Assured Water Supply Rules create incentives to use renewable supplies, such as Colorado River water imported through the Central Arizona Project ("CAP"), in lieu of pumping groundwater.

Q. To your knowledge, do any of the Robson utility companies hold a CAP subcontract in the Pinal AMA or for that matter, in any AMA?

A. No. To my knowledge, no CAP subcontracts are held by any Robson utility. This includes Municipal and Industrial ("M&I") CAP subcontracts and Non-Indian Agriculture ("NIA") CAP subcontracts, which were recently made available to municipal water providers within the three-county CAP service area. In contrast, the Arizona Water Company holds two long-standing CAP M&I subcontracts in the Pinal AMA alone. Arizona Water Company's Casa Grande System has an M&I subcontract for 8,884 acre-feet per year ("afy") and the Company's Coolidge System has an M&I subcontract for 2,000 afy. In addition, the Arizona Water Company holds two other M&I CAP subcontracts in the Phoenix AMA.

Q. How is Arizona Water Company using its CAP supplies in the Pinal AMA?

A. In late 2014, Arizona Water Company obtained three Water Storage Permits from the Arizona Department of Water Resources ("ADWR") to store its CAP water at Groundwater Savings Facilities in the Pinal AMA. In 2015, Arizona Water stored 5,000 af of CAP water in the Pinal AMA at these facilities. In addition, Arizona Water Company

delivered 1,928 af of CAP water to its customers for non-potable use in 2014, and delivered another 2,389 af for non-potable use in 2015. The Company also received an Underground Storage Facility Permit and a Water Storage Permit from ADWR to construct and store additional CAP water in the Pinal AMA, which is projected to reduce the amount of mined groundwater in the AMA by Arizona Water Company by 50% each year. None of these actions were required by state law or regulation. They are, however, good examples of best management practices by a public service corporation water utility using its capital for conservation efforts in water challenged AMAs without being compelled by law to do so.

It should be noted that the Pinal AMA has a much more generous groundwater allowance than the Tucson and Phoenix AMAs, which substantially reduces any groundwater replenishment obligation there. Not only is a groundwater allowance given for residential development on retired farmland, until recently, a generous groundwater allowance was available on all lands in the Pinal AMA, including raw desert based on a groundwater allowance of 125 gallons per capita per day ("gpcd"). This approach effectively removed any incentive for new subdivision development to use renewable water supplies in lieu of pumping groundwater. The result is heavy reliance by new residential growth in the Pinal AMA on cheaper groundwater supplies. And, unlike the Phoenix and Tucson AMAs, little or no groundwater replenishment is required in the Pinal AMA for new subdivisions. Without the importation of CAP water into the AMA and a commensurate replenishment obligation to replace pumped groundwater supplies with renewable water supplies, very real concerns exist that "physically available groundwater" as defined by the Assured Water Supply ("AWS") program will soon be exhausted in parts of the Pinal AMA. This situation is likely to be compounded when the irrigation districts in the AMA increase their groundwater pumping because the CAP Agricultural Pool will

be reduced beginning in 2019 and ultimately, terminated in 2030. And, if the long-term drought conditions continue throughout the Colorado River Basin, the drawdown of finite groundwater supplies in the Pinal AMA is likely to be exacerbated by cutbacks in lower priority CAP deliveries.

Q. Mr. Soriano "strongly disagrees" with your testimony that the severance of Phase III of SaddleBrooke from Robson's Lago Del Oro Water Company's CC&N and the formation of a new Robson water utility known as Ridgeview Utility Company in 2001 to provide water service was not done to conserve water. (Soriano Rebuttal Testimony, p. 6, line 11). How do you respond?

A. I think Mr. Soriano's rebuttal testimony proves my point. Mr. Soriano states that "[i]n order for Lago Del Oro Water company to serve Phase III, it would have had to opt out of the GPCD program and participate in ADWR's Non Per Capita Conservation Program ("NPCCP") of the Third Management Plan. That would have resulted in *significantly increased costs* (emphasis added) from enrolling in the Central Arizona Groundwater Replenishment District ("CAGRD"), which costs would have been passed on to the utility's customers." It is apparent from Mr. Soriano's testimony that the decision to create Ridgeview, a new water utility to serve Phase III of SaddleBrooke, was a financial decision, not a decision driven by good water management considerations. Ridgeview was enrolled in the CAGRD, however, had the customers within the new CCN remained with Lago del Oro, Lago would have been required to reduce its GPCD rate or employ additional conservation methods under ADWR's NPCCP.

Q. How does Arizona Water Company's investment in renewable water supplies in the Pinal AMA factor into the question of whether it is providing "reasonable service" in its Pinal Valley water service area?"

A. It is clear that Arizona Water Company has chosen to exceed the bare minimum legal requirements of the state's Groundwater Management Code by committing to the use of CAP water in an area where it really makes a difference. Arizona Water's track record of water supply stewardship in its Pinal Valley service area is consistent with the state's best water conservation policies. From what I have researched, the same cannot be said of the Robson-owned water utilities, even if the bare minimum legal requirements are being met as Mr. Soriano has testified.

Q. Does this conclude your testimony?

A. Yes, it does.

Exhibit D

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
DOUG LITTLE - CHAIRMAN
BOB STUMP
BOB BURNS
TOM FORESE

IN THE MATTER OF THE JOINT APPLICATION OF ARIZONA WATER COMPANY TO EXTEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY AT CASA GRANDE AND PINAL COUNTY, ARIZONA.	DOCKET NO. W-01445A-03-0559

Surrebuttal Testimony of

Paul Walker

on Behalf of

Arizona Water Company

January 11, 2016

I. Introduction.

Q. Please state your name and business address.

A. My name is Paul Walker. My business address is 330 East Thomas Road, Phoenix, Arizona 85012.

Q. By whom are you employed and what is your position?

A. I am the founder, owner and President of Insight Consulting, LLC.

Q. Please describe your education.

A. I have a Master's Degree in Business Administration from the Thunderbird School of Global Management. I have a Bachelor's Degree in Business Management from the University of Phoenix. I am a graduate of numerous U.S. Army schools, including the U.S. Army War College's Combined Arms and Service School, the U.S. Army Officer Advanced Course (Transportation), and the U.S. Army Officer Basic Course (Military Police).

Q. Please describe your professional background and experience.

A. From 2004 to present I have worked as a lobbyist and regulatory consultant for clients in the utility and energy sectors. I worked with Wall Street investment firms from 2004 to 2009, conducting regulatory analysis of federal and state matters ranging from rate cases in numerous states, and evaluating liquefied natural gas export terminal feasibility. I have worked with several Arizona utilities, including Arizona Public Service, Tucson Electric Power, Arizona Water Company, Liberty Utilities, and, of course, Global Water Resources.

Prior to that, I served as advisor to Commissioner Marc Spitzer at the Arizona Corporation Commission, and on Governor Jane Dee Hull's Indian Gaming compact negotiation team. I have also served on the Commission's Power Plant and Line Siting Committee.

Additionally, I am the vice-chairman of ConservAmerica, a national Republican organization focused on federal energy policy and legislation; I chair an independent expenditure committee that spends and coordinates advertising and election support for Republican congressional candidates throughout the United States; and I am the chairman of the Arizona Security and Prosperity Project, a 501(c)4 organization focused on improving Arizona's border security and economic development. I also served as the Chairman of Arizonans for Responsible Water Policy, a non-profit entity that focused on improving the regulatory climate for water and wastewater companies in Arizona. I also serve as an advisor and equity holder in a financial services firm that is focused on serving the unbanked population in the United States and Africa.

Q. Have you previously testified before the Commission?

A. Yes, I have provided testimony in a number of Commission proceedings on issues such as regulatory policy, water utility acquisitions, utility financial issues, the System Improvement Benefit ("SIB") mechanism, and other topics. Dockets where I have testified or submitted written testimony include:

- Arizona Water Company's SIB proceeding (Docket No. W-01445A-11-0310);
- Global Water's last rate case (Docket No. W-01212A-12-0309 et al.);
- EPCOR and Global Water's Application for Approval of Sale and Transfer of Assets of Willow Valley Water Company (W-01732A-15-0131 and W-01303A-15-0131); and
- Arizona Water Company's Application to Extend its CC&N (Docket No. W-01445A-03-0559).

I have also given numerous presentations at regulatory workshops and industry meetings, on issues ranging from industry consolidation, acquisitions, alternative financing mechanisms, environmental issues and concerns, the energy-water nexus, and return on equity issues. I have co-authored white papers on distribution system improvement charges, and strengthening and consolidating the Arizona water industry.

Q. Have you reviewed the rebuttal testimony of Ernest G. Johnson (Hearing on Remand – Phase 2)?

A. Yes, I reviewed a version of that testimony following the rulings by the Commission striking significant portions of the original rebuttal testimony provided by Mr. Johnson.

Q. Please provide an overview of your surrebuttal testimony.

A. I will respond to Mr. Johnson's rebuttal testimony, testifying on behalf of Cornman Tweedy 560, LLC. Mr. Johnson characterized my position as "based on an unsuitable premise", "not responsive to the Commission's examination of the questions posed in the procedural order', "arguing in favor of regulatory entitlements", and wholly wrong on the public interest. Each of his characterizations is incorrect.

Q. What is the premise of your argument in favor of the Commission rejecting Cornman Tweedy's request to delete a portion of Arizona Water Company's CC&N?

A. The Commission should uphold Arizona Water Company's CC&N because doing so best serves the public interest. It is indisputably true that CC&Ns serve the public interest by establishing the obligation to serve a certificated area with essential public services – in this case, water utility service. This is part of the "regulatory compact" recognized in Arizona, providing generally that in exchange for the obligation to serve an exclusive area, a utility is provided with protection from challenges to its CC&N area and an opportunity to earn a return on its investment. A CC&N is not a "regulatory entitlement" it is instead a

regulatory obligation, and that obligation comes with both costs and potential future benefits. A CC&N is akin to a contract between the utility and the public, a contract established, overseen and monitored by the Commission. Cornman Tweedy 560, LLC wants the Commission to revoke that contract so that its parent company can instead have it. That's what this case is actually about – an entity trying to revoke a CC&N so that its parent company can have an affiliate take the CC&N for itself.

Q. Has the Arizona Supreme Court evaluated the question of CC&Ns in the light of the public interest?

A. Yes, in the case of *James P. Paul Water Co., v. Arizona Corporation Commission*, 137 Ariz. 426, 671 P.2d 404 (1983) the Court evaluated whether the Commission can delete a portion of a CC&N. The Court concluded that the CC&N "gave Paul the exclusive right to supply domestic water service to several sections of relatively undeveloped land", and, citing its decision in Application of Trico Electric Cooperative, Inc. and *Davis v. Corporation Commission*, 96 Ariz. 215, 393 P.2d 909) (1964) stated that the CC&N should not be deleted absent a finding that the certificate holder "failed to render satisfactory and adequate service therein, at reasonable rates."

The Court further stated that "the public interest is the controlling factor in decisions concerning service of water by water companies" and that "a certificate holder was entitled to an opportunity to provide adequate service at a reasonable rate before a portion of its certificate could be deleted. A certificate holder is entitled to that opportunity because providing it with that opportunity serves the public interest."

Q. Do you believe that Cornman Tweedy has the right to delete a portion of Arizona Water Company's CC&N in this proceeding?

A. No, I do not. Contrary to Mr. Johnson's characterization, I do not misunderstand the scope of this proceeding. My position is not "unresponsive", as Mr. Johnson asserts, because it

differs from his. Mr. Johnson believes that the public interest is only served by allowing integrated water and wastewater providers to serve new growth; my view is that the public interest is not best served by a "one size fits all" approach. Instead, the Commission's job is much more complex – and it requires, always, balancing many competing legal, financial, environmental, and engineering questions.

Q. But you have, many times in the past, argued for integrated water and wastewater service, have you not?

A. I have made that argument in appropriate circumstances because integrated water and wastewater service can, as Mr. Johnson recognizes, provide benefits – addressing each of the questions the Commission must balance. It can provide financial, environmental, and engineering benefits. However, just because a particular integrated company may offer those benefits does not mean that stand-alone companies cannot.

Nor does it mean that stand-alone water companies cannot adopt and implement comprehensive plans to include and use reclaimed water. Bear in mind that certain integrated developer-controlled entities, like Robson's Picacho Sewer Company, and its separate affiliate, Picacho Water Company, have divided loyalties. Such a captive developer-owned utility could, and sometimes does, manipulate and divert those benefits to its proprietary homebuilding interests instead of flowing those benefits through to the ratepayers of its captive water and sewer companies. Arizona Water Company President William Garfield provides examples in his direct and Surrebuttal testimony in this proceeding. Also, as Mr. Garfield testifies, Arizona Water Company is ready, willing and able to provide wastewater utility service together with water service in those parts of its Pinal Valley CC&N where wastewater is not already provided. This could include the Cornman Tweedy area, although Robson's Picacho Sewer Company holds the wastewater CC&N there but has no operating wastewater facilities in or near that area.

Instead, Arizona's water future and current water challenges (we are in a situation of much

decreased surface water and precipitation that appears to be "the new normal")[1] require stand-alone water companies to develop more innovative and collaborative arrangements with wastewater companies.

Vitally, we are in a statewide situation in which the Commission needs more and more to work with Arizona's water companies to develop innovative and collaborative policies, improved regulatory tools, and approaches to manage that future.[2]

Q. Are you aware of whether Arizona Water Company has developed "more innovative and collaborative arrangements with wastewater companies"?

A. I am. I worked with Global Water Resources during its litigation with Arizona Water Company concerning the extension of Global's CC&N area in western Pinal County last decade. After a lengthy, contentious, and costly litigation, the two companies reached a settlement that provided for cooperation in Global's efforts to provide wastewater service in areas where Arizona Water Company was granted a water service CC&N, and importantly, provided Arizona Water Company with access to reclaimed water provided from Global Water's wastewater treatment system for Arizona Water Company's use in its newly-certificated areas.[3]

As a result, Arizona Water became able to offer domestic water service to homes and businesses, and to provide reclaimed water for use on turf irrigation areas.

I am also aware that Arizona Water Company has been working with the City of Casa Grande to allow reclaimed water service (provided by Casa Grande's wastewater system) in Arizona Water Company's certificated areas, both for direct delivery of reclaimed water and for recharge to offset the use of groundwater.

In both these instances, Arizona Water Company worked with the wastewater provider to

[1] See, e.g., "The Energy-Water Nexus, From a Private Water Perspective" presentation I made at the VerdeXchange Conference earlier this year; see also "Responsible Water letter RE Water Future" to the Commissioners earlier this year, at Attachments A and B.

[2] See, e.g., "RUCO RW Filed White Paper from ACC Docket"; and "Beyond Rate Shock-Regulatory Lag-Responsible Water- Oct 2012"at Attachment C.

[3] See, Global Water – Arizona Water Company Settlement, at Attachment D

develop comprehensive plans to maximize the beneficial use of reclaimed water within the communities and areas Arizona Water Company serves, and will serve in the future. The Commission should encourage more of that approach, rather than reaching a conclusion that stand-alone water service is no longer "in the public interest".

Q. Mr. Johnson states that he believes "integrated water and wastewater systems are essential in order to advance water sustainability"[4], how do you respond?

A. I disagree. Again, the Commission will not, has not, and cannot address the water and economic challenges this state faces by adopting simplistic solutions to complex problems. There are 282 regulated water utilities in Arizona; the concept of "one size fits all" has not been effective in practice.

Q. What is, in your opinion, the public interest in this case?

A. It is what it always is, as Professor James C. Bonbright wrote in what I consider the essential, unequivocally best, book ever written on the challenge of utility regulation, "Principles of Public Utility Rates". There, he called "the public interest" a phrase "almost unique in its extreme vagueness… One is tempted to say that the so called standard of public interest is not a real standard at all; that instead it is a mere form of words of highly emotional content, invoked as an instrument of persuasion by people who have at heart much more immediate interests… interests often, but not always, of a self-seeking nature."[5]

Because I deeply agree with Professor Bonbright's view of that phrase, I try very hard to avoid using it at all – instead I prefer the view he provides in his preface to that work: "[T]o a substantial extent, sound ratemaking policy is a policy of reasonable compromise among partly conflicting objectives."

[4] Rebuttal Testimony of Ernest G. Johnson, Sr., Esq. at Page 15, Lines 9-10

[5] Principles of Public Utility Rates, James C. Bonbright, 1961 (Part One – Basic Standards, Chapter II, The Public Interest As the Assumed Goal of Rate Making, Section "Public Interest or Social-Welfare Criteria of Reasonable Rates")

This case provides the Commission with the choice between affirming the fact that CC&N holders bear obligations and costs to serve areas – and those costs are real, and have been borne by Arizona Water Company; or agreeing with the sentiments expressed during the Chairman Mayes era Commission that: "stand-alone water companies may no longer be in the public interest."

Q. Mr. Johnson repeatedly claims that stand-alone water companies are not troubled by that proposition at all because they haven't intervened in this case. Do you think that's a fair assumption?

A. I don't think it's correct at all, and I think it belies an unfamiliarity with the life of a water company. It is true that the larger companies have not intervened in this case – but there are six large water companies in Arizona; EPCOR, Robson Utilities, Johnson Utilities, Global Water, Liberty Utilities, and Arizona Water Company. Half of those companies are clients of mine; and I can assure you that Liberty and Global are aware of this case. It appears that Mr. Johnson wants companies to weigh in on behalf of Arizona Water Company, and I believe they would be willing to do so and strongly support Arizona Water Company's position in this case.

As to the 276 companies that are smaller – they don't have staffs anything like the electric utilities. Mr. Johnson is used to seeing APS, Tucson Electric/Unisource, and Salt River Project intervening and tracking each other's cases; what he doesn't point out is that each of those companies has billion-dollar plus annual revenues. They have lots of analysts, attorneys and lobbyists on staff and on contract to track the Legislature, County and City Governments, Federal legislation, rules, and agency proceedings, and of course, the Commission. Those costs are largely recovered through rates paid by their customers. Water companies throughout Arizona, all combined, don't have the annual revenues of any one of those entities – and are incapable of tracking and intervening in each other's cases.

Q. What was your role with Windsong Water Company, in Sanders, Arizona?

A. In my capacity as chairman of Arizonans for Responsible Water Policy, I was called by Staff to ask for help with this very small system. It had a host of regulatory and operational challenges, hadn't filed a rate case in over 20 years, hadn't filed annual reports in over a decade, and in fact had its CC&N administratively revoked. Yet it was providing water service to between 55 and 60 homes (during my work with the company) in the small community of Sanders, Arizona.

Q. What steps did Responsible Water take to assist Windsong Water?

A. The members of Responsible Water, including Arizona Water Company, donated time and Resources to make Windsong Water fully operational and establish regulatory compliance. Arizona Public Service company provided $15,000 in funding to resolve serious and dangerous electrical problems. All told, about $90,000 of work, infrastructure, and support was provided over a two-year period.

Q. What is the current status of Windsong Water?

A. Despite our efforts, ADEQ and the EPA found Windsong Water to be out of compliance on uranium contamination (caused by Federal uranium mining in the 1950s); and Windsong Water is currently being forced to surrender its CC&N so that Navajo Tribal Utility Authority (NTUA) can take the system over without compensating the owner. NTUA refused to negotiate an interconnect agreement under which our group would have borne all the costs of interconnection, refused to even consider a purchased water agreement, and instead worked with the regulators to strip the CC&N from Windsong Water.

Q. What's the moral of the story with Windsong Water?

A. The moral of the story is that even when outside entities step in, and spend years and large sums of money to help a struggling company, and even when the record clearly shows dramatic improvements, a collateral attack on the CC&N is the cheapest way to take over a utility.

Q. Are you familiar with any other situations that would be affected by a Commission precedent finding that a water-only company is not providing reasonable service if it doesn't provide integrated water and wastewater service?

A. Yes, Global Water acquired West Maricopa Combine a decade ago. One of the systems involved in that acquisition was the Valencia Water Company. Earlier this year, Global Water and the City of Buckeye agreed to a stipulated condemnation of Valencia. Under the stipulated condemnation, Buckeye acquired the approximately 7,000 connection system for $55 million, and Buckeye agreed to pay a $3,000 per connection growth premium for the next 20 years to compensate Global Water for the lost opportunity to serve its CC&N.

If the precedent that Cornman Tweedy seeks here had been in place, it is very possible that Buckeye would simply have requested that the Commission delete the CC&N of Valencia because Valencia Water was a stand-alone water company, and Buckeye was providing integrated water and wastewater service in every area surrounding Valencia, and was the wastewater provider for Valencia's customers. Such decision, contrary to the public interest, would allow a municipal condemnor to potentially avoid payment of constitutionally-guaranteed just compensation by arguing the water-only company was not providing "reasonable service" and their CC&N should be revoked or deleted. I believe it is very likely that had this precedent been in place, Buckeye would have likely made that argument for the CC&N areas covered in the growth premium. So we are talking about a very significant change to the value of CC&Ns; and the precedent would create a very high degree of leverage for municipalities, or larger, integrated companies, to use to strip

CC&N from water-only companies.

Q. Mr. Johnson thinks those fears are unfounded, doesn't he?

A. Yes, he clearly does – but I have spent 12 years in the private sector working on acquisitions, sales, and condemnations in the water industry. And my experiences lead me to conclude that this is a profound change we are considering.

Q. If the Commission deletes the CC&N of Arizona Water Company on the grounds that water-only utility service is not reasonable service, what should the Commission expect as a result of establishing that new precedent?

A. More cases like this one. Windsong Water writ large – integrated municipal providers will target unserved CC&N areas for deletion; developers with plans in water-only CC&N will also likely do the same; and, frankly, integrated providers will likely start looking at CC&N areas bordering theirs, served by water-only providers, and seriously considering making similar filings. The result will be, I'm afraid, a host of cases like this one; all probably heading to the Supreme Court – a vast waste of Commission time, resources, and its credibility as an entity turning its focus to addressing water issues under the new Chairman's direction.

Q. But under Mr. Johnson's regulatory model, customers would receive integrated water and wastewater service, and that would be a benefit, wouldn't it?

A. One of my favorite economists of all time is Frederic Bastiat. He constantly cautioned that what we have to do is look beyond what is seen to that which is unseen. In fact, one of his more famous pieces of writing is "What Is Seen and What Is Not Seen". In that paper, he wrote,

> "In the economic sphere an act, a habit, an institution, a law produces not only one effect, but a series of effects. Of these effects, the first alone is immediate; it

appears simultaneously with its cause; it is seen. The other effects emerge only subsequently; they are not seen; we are fortunate if we foresee them. There is only one difference between a bad economist and a good one; the bad economist confines himself to the visible effect; the good economist takes into account both the effect that can be seen and those effects that must be foreseen. Yet this difference is tremendous; for it almost always happens that when the immediate consequence is favorable, the later consequences are disastrous, and vice versa."

Here, Mr. Johnson is attempting to argue that what is seen will be customers receiving integrated water and wastewater service from integrated providers offering regional reclamation, reuse, and recharge. What is unseen is that the vast majority of Arizona's 282 water companies are providing more than reasonable service. What is unseen being that the precedent Mr. Johnson and Cornman Tweedy are asking this Commission to establish puts water-utility CC&N assets, and the costs they incurred in attaining those CC&Ns, permitting and planning those CC&N areas, and their infrastructure investment decisions made in anticipation of one day serving their entire CC&N at risk. It fundamentally changes how they will view and plan for service in the CC&N areas that they currently hold.

There are two ramifications to that; one a justice concern, the other an economic and operational concern.

Q. What is the "justice concern" raised by a Commission decision finding that a water company is not providing reasonable service unless it provides integrated water and wastewater service?

A. Again, Mr. Bastiat provides a concise statement, "But how is this legal plunder to be identified? Quite simply. See if the law takes from some persons what belongs to them and gives it to other persons to whom it does not belong. See if the law benefits one citizen at the expense of another by doing what the citizen himself cannot do without

committing a crime."

In this case, the Robson entities acquired a development, the Cornman Tweedy 560 LLC *after* it had asked for service from Arizona Water Company and *after* the Commission had granted a CC&N to Arizona Water Company to serve the area, and *after* Arizona Water Company had incurred significant costs in planning to serve that area.

No one can dispute that Arizona Water Company has incurred significant legal, planning, and permitting costs to serve the area. Or that it holds the CC&N to serve the area. The question here is whether that asset can now be taken from Arizona Water Company under the guise of what one entity calls "the public interest."

The rationale for Mr. Johnson's position is based on an extremely vague notion, couched in emotional words, backed by the unsupportable innuendo that Arizona Water Company does not, cannot, and will not emplace reclaimed water use – despite Arizona Water Company's efforts and proven ability to do so with a competitor, Global Water, and a municipality, Casa Grande.

But it is exactly this sort of "philanthropic" "public interest" that Mr. Bastiat was most wary of, I agree with Mr. Bastiat's assertion that "[t]he mission of law is not to oppress persons and plunder of them their property, even though the law may be acting in a philanthropic spirit. Its mission is to protect property."

If one does not like to rely upon Mr. Bastiat[6], one can then consider the words of the Arizona Supreme Court in the James P. Paul case, in which the Court wrote:

> "If a certificate of convenience and necessity within our system of regulated monopoly means anything, it means that its holder has the right to an opportunity to adequately provide the service it was certified to provide. Only upon a showing that a certificate holder, presented with a demand for service which is reasonable in light of projected need, has failed to supply such service at a reasonable cost to

[6] Frederic Bastiat is still renowned, 165 years after his death, for his ability to explain economic concepts in terms that non-economists could understand. In "The Parable of the Broken Window", M. Bastiat launched the entire concept of "opportunity cost" – a pivotal development in free market economic theory.

customers, can the Commission alter its certificate. Only then would it be in the public interest to do so… Where a public service corporation holds a certificate for a given area, the public interest requires that that corporation be allowed to retain its certificate until it is unable or unwilling to provide needed service at a reasonable rate."

Q. Your second concern was, you said, an economic and operational concern. What is that concern?

A. If the Commission upholds Mr. Johnson's theory – and determines that "reasonable service" from a water company is not provided unless it offers integrated water and wastewater service, the entire economics of Arizona's water industry will change dramatically.

Many permutations become possible: Perhaps water companies will begin developing wastewater systems and attempting to emplace them throughout the state to ensure that they don't lose their CC&N. Yes, that would create more reclaimed water, but it would also be an extremely costly endeavor. And water companies would have to expand their staff and operational expertise to provide wastewater service – and to reuse or recharge the water, will have to emplace reclaimed water distribution infrastructure, build recharge projects, or get AzPDES permits.

Large, integrated providers, like two of my clients, would be able to target water-only companies that hold CC&Ns and argue that any unserved CC&N areas should be deleted and granted to the integrated company. This would create a sort of civil war between water-only and integrated companies.

Developers could leverage water-only companies by threatening to file deletion applications to remove their areas from the water company unless the water company agrees to the developer's terms.

Municipalities that have water-only companies in their planning areas could file to strip

any unserved but certificated area from those companies, and may go further and begin any acquisition or condemnation activity by filing an application to delete CC&N from a water-only company under the grounds that the company is not providing "reasonable service" and that "the public interest" would be better met if the municipality took over the area and offered integrated service instead.

Operationally, water companies would have to seriously consider extending infrastructure into currently unserved areas, while those assets would be economically stranded (i.e., not emplaced into rate base or recovered upon) they would at least bolster the company's claim that it is willing and able to provide water service. But, again, under Mr. Johnson's theory that is insufficient – so they would be placed somewhere between the devil and the deep blue sea. Their plans, their sunk costs of attaining, planning, and permitting CC&N areas, their economic hopes of growing their companies would all be in peril. None of these results would further the real interests of the public of Arizona.

Mr. Johnson is right, Arizona does face significant water challenges; but what we need from the Commission is leadership to bring together a holistic reform that strengthens the industry by providing more reasonable regulatory processes, more fair and investment-encouraging policies and decisions, and a program of consolidation that relies on negotiated, amicable transactions instead of regulatory and court battles. The future challenges we face will not be made lesser, or more manageable by creating the future that this precedent will create. That's my point.

Q. Does this conclude your testimony?

A. It does.

Paul Walker Surrebuttal Testimony

January 11, 2016

ATTACHMENT A

The Energy-Water Nexus, From a Private Water Perspective

PAUL WALKER, INSIGHT CONSULTING

CHAIR, RESPONSIBLE WATER; VICE PRESIDENT, CONSERVAMERICA

Energy Water Nexus, What is it?

Water Demand (Electric Utilities)

- Thermal-power generation
- Hydroelectric facilities
- Thermal desalination

Energy Demand (Water Utilities)

- Water pumping
- Water treatment
- Water distribution
- Wastewater lift stations
- Wastewater treatment
- Effluent distribution

Cost Recognition for Electric Side of the Energy-Water Nexus

Power Supply Costs (Electric)

- Thermal-power generation
- Hydroelectric facilities

Related Adjustor Mechanisms

- Fuel Cost Adjustors
- Purchased Power Cost Adjustors
- Transmission Cost Adjustors

Cost Recognition for the Private Water side of the Energy-Water nexus

Power Demand Costs (Water)

- Water pumping
- Water treatment
- Water distribution
- Wastewater lift stations
- Wastewater treatment
- Effluent distribution

Related Adjustor Mechanisms

- Purchased Water Adjustors
- Purchased Power Adjustors
- (Both are very uncommon in Arizona)

A Key Difference?

- Water utilities use electricity to pump groundwater (or buy transported CAP water), treat it (e.g., Cl, As), and distribute drinking water.
- Wastewater utilities use electricity to recover, treat and clean wastewater, and to distribute the reclaimed water.

- When electric utilities purchase power to serve their customers, the power is, obviously, directly provided to customers as the end product.

- However, when electric Utilities use purchased fuel as an input to their end product – e.g., natural gas to fire a turbine, or coal to boil water and produce steam – their fuel use is akin to water's use of electricity.

Energy Costs for Water Utilities

- **The lifecycle energy consumption of 1 million gallons of water can reach up to 25,000 kWh**
  - (CEC, 2005, as cited in DOE Dec. 2006 Report to Congress)
- Low-end is ~ 10,000 kWh if surface water is directly fed from source to utility.
- Obviously the CAP, a 334-mile canal is not the low-end; nor is groundwater pumping
- There is no private water company in Arizona that isn't relying on pumped groundwater or transported CAP water.
  - **Thus Arizona water providers are on the high end of the power consumption curve**
- Water/Wastewater Operations comprise nearly 4% of U.S. electricity consumption (EPRI, 2002b; EIA, 1998, as cited Ibid.)

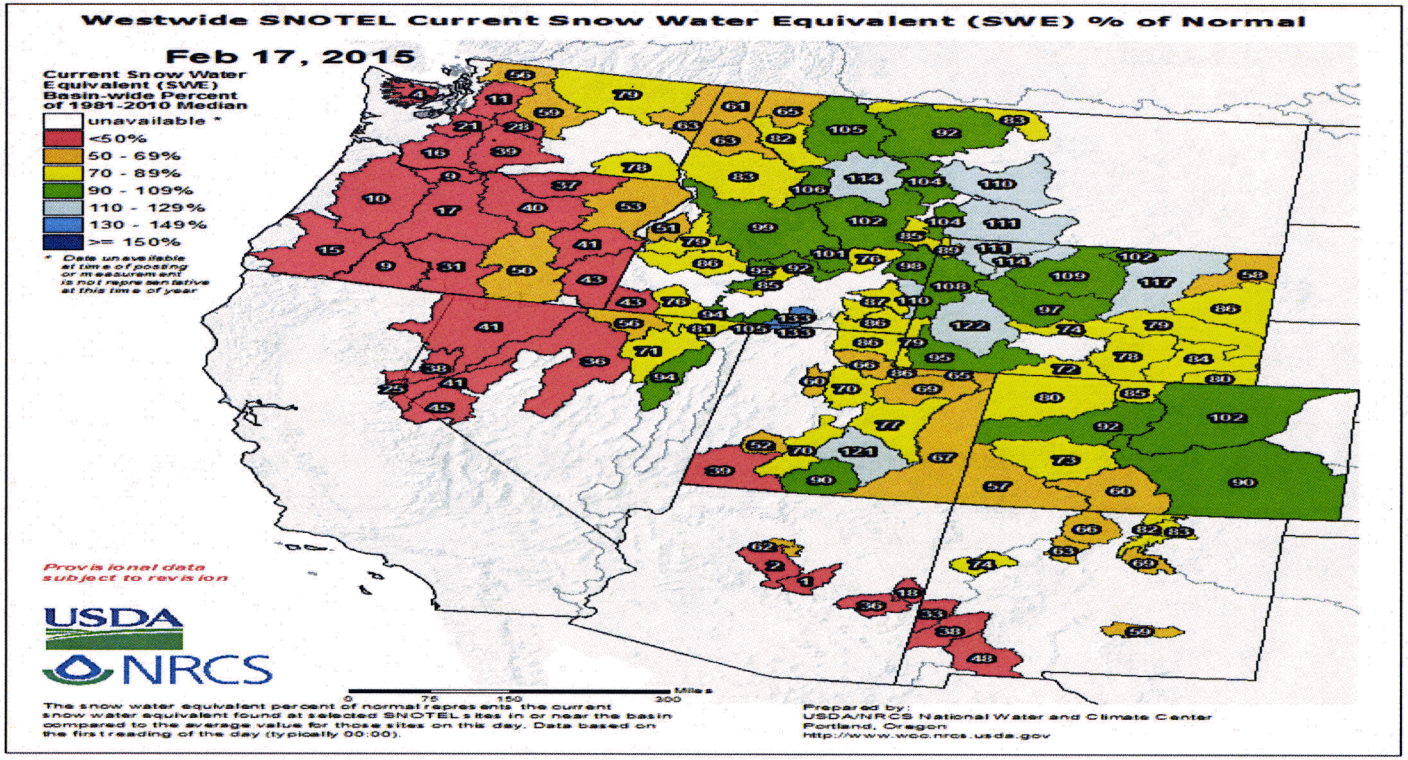
Kilowatt-Hours to Pump One Million Gallons of Groundwater

- From 120' depth ---- 540 kWh
- **From 400' ---- 2000 kWh**
- A 333% increase in depth to water leads to a 370% increase in power costs to lift the water.
  - See, e.g., Cohen, 2004 (as cited in DOE Report to Congress, Dec. 2006)
- **If every 1% change in depth = a 1.11% increase in power demand; then groundwater models showing continuing declines are particularly troubling.**

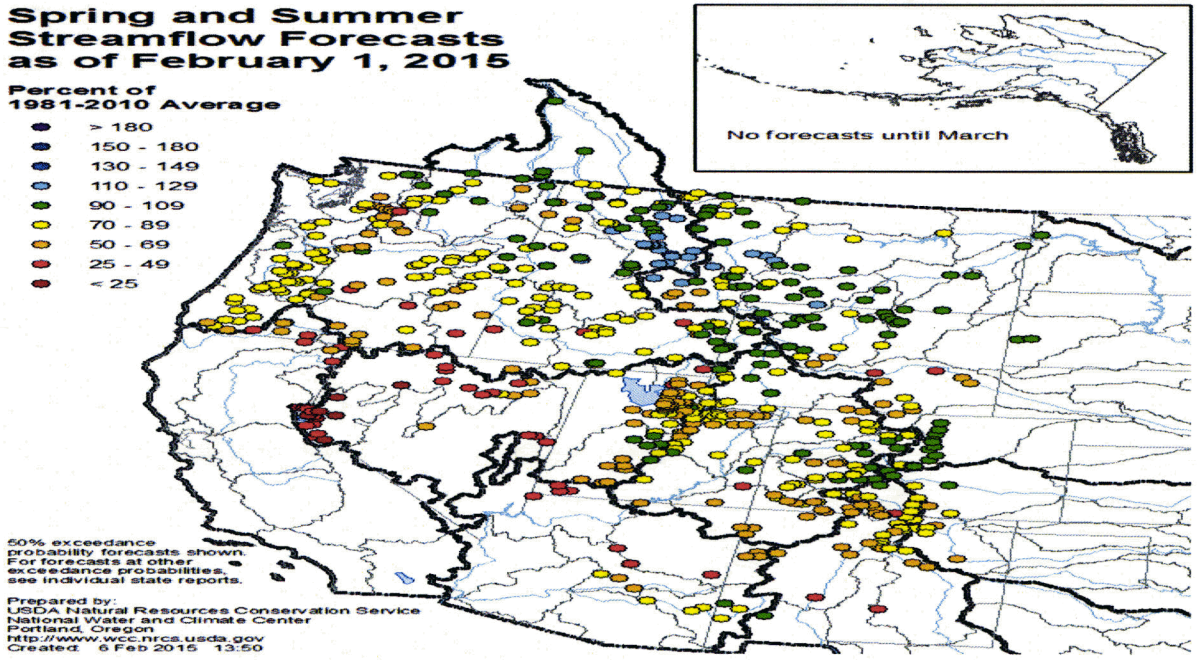
Water Customers face high energy price risks

- **If / When the Colorado River becomes curtailed, groundwater pumping will increase and declines will accelerate.**
  - Water's 4% consumption of electric supply will quickly soar.
- Water pumping tariffs have been very highly priced by the ACC – past RUCO directors supported double-digit hikes to water companies while keeping residential rates flat.
- Dramatically increasing power costs will quickly force many small water utilities into rate cases and power supply adjustor mechanisms.
- Retaining the high water pumping tariffs will only exacerbate the rate impact on water customers.

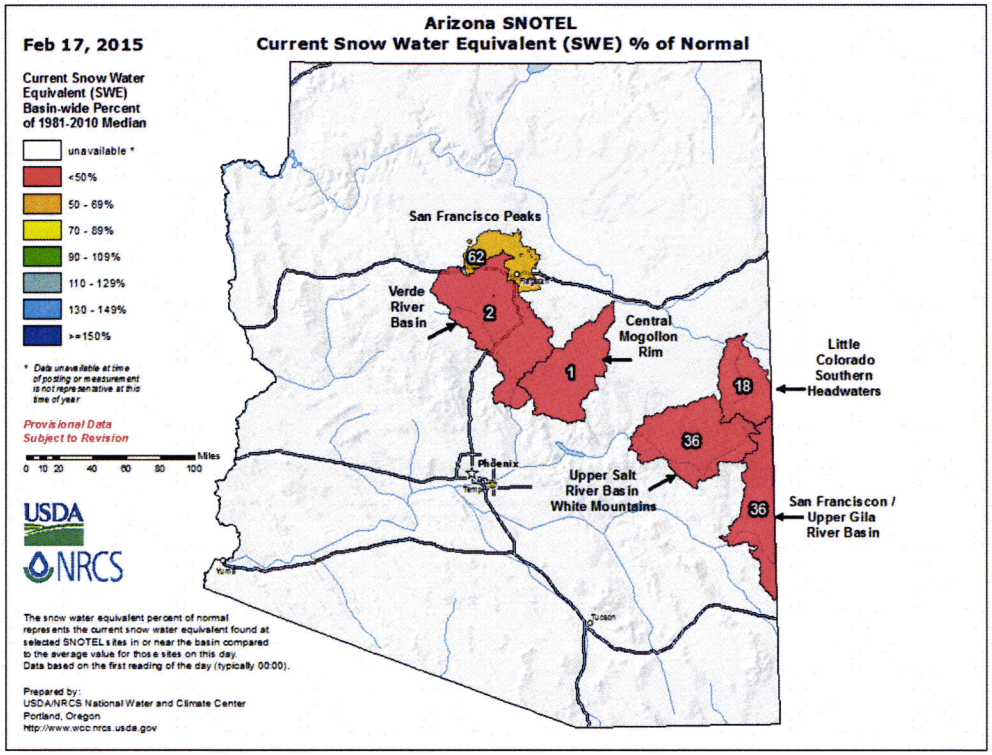
Is Water becoming more scarce?



Is Water becoming more scarce?



Is Water becoming more scarce?



NASA's Megadrought Model

Published February 2015

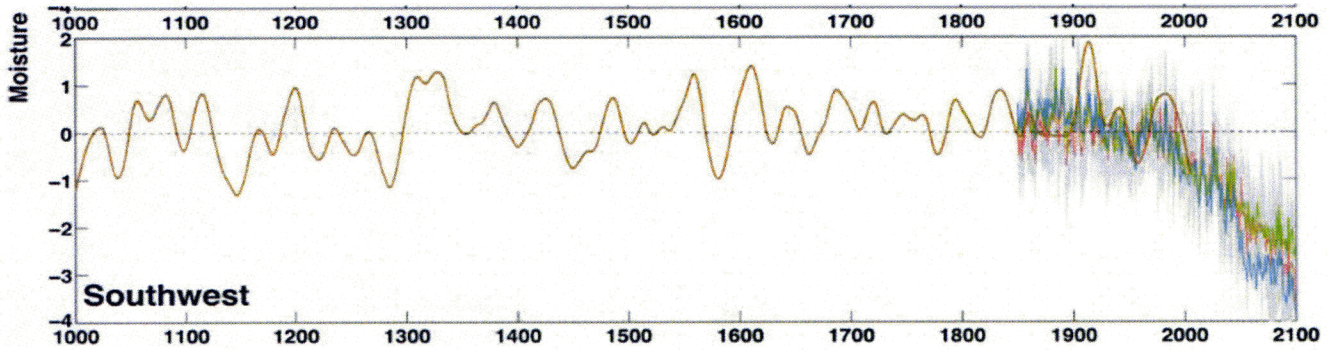


Fig. 1. Top: Multimodel mean summer (JJA) PDSI and standardized soil moisture (SM-30cm and SM-2m) over North America for 2050–2099 from 17 CMIP5 model projections using the RCP 8.5 emissions scenario. SM-30cm and SM-2m are standardized to the same mean and variance as the model PDSI over the calibration interval from the associated historical scenario (1931–1990). Dashed boxes represent the regions of in- (125°W–105°W, 32°N–41°N). Bottom: Regional average time series of the summer season moisture balance metrics from the NADA and CMIP5 models. The observational NADA PDSI series (brown) is smoothed using a 50-year loess spline to emphasize the low-frequency variability in the paleo-record. Model time series (PDSI, SM-30cm, and SM-2m) are the multimodel means averaged across the 17 CMIP5 models, and the gray shaded area is the multi-

The Scope of the Threat

- Arizona has 282 private water companies serving over 500,000 connections.
- **There is not sufficient economic scale to deal with the water challenges we currently face, and If/When 1075' at Lake Mead occurs, the following WILL happen:**
  - Water curtailments reduce agriculture's CAP supplies by over 300,000 af/year;
  - Leading to groundwater declines as agriculture is forced to pump groundwater to keep producing food for us.
  - Power cost escalations as hydro goes offline, combined with
  - Increasing power demands by water suppliers as the result of groundwater declines.
- **Groundwater declines + Higher power costs = Extreme price escalation & Financial crises for small water providers.**
- **Groundwater declines will, inexorably, run wells dry in many communities.**

What Has to Happen... Now, actually.

- **Consolidation of the private water industry on a massive and unprecedented scale and at a nearly breakneck pace.**
- **Large entities can emplace:**
  - Regional infrastructure solutions,
  - Reclamation & Reuse,
  - AMI technology,
  - Centralized, 21st Century AMI and SCADA-reliant control architecture,
    - Manages water and, vitally, manages power consumption and timing.
  - Large-scale recharge (e.g., the Liberty-CAGRD "Luke Sink" 100-year project,
  - System Improvement Plans to identify and repair or replace ALL leaking and failing water mains.
- **The vast majority of the companies that need to be consolidated into a larger entity are very rural, very small, and cannot be acquired without a new regulatory paradigm.**

Paul Walker Surrebuttal Testimony

January 11, 2016

ATTACHMENT B

ARIZONANS FOR RESPONSIBLE WATER POLICY

April 1, 2015

Chairman Susan Bitter Smith
Commissioner Bob Stump
Commissioner Bob Burns
Commissioner Doug Little
Commissioner Tom Forese
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

In Re: Docket No. WS-00000A-14-0198

Dear Commissioners:

A few weeks ago I spoke at the Verde XChange Conference in Phoenix on a panel addressing the energy water nexus. My presentation was focused on the challenges I expect Arizona to confront over the next decade as the Colorado River supplies continue to dwindle, the Western drought continues unabated, and Lake Mead rapidly approaches the 1075' elevation at which the Secretary of the Interior will declare a shortage and issue a curtailment order.[1]

Obviously, those are major problems facing Arizona's water supplies – and we do have reason to be at least concerned, if not alarmed. One thing we do not need to do, however, is panic. Arizona has built the best in the nation approach to water management – our canals, recharge operations, rate design, and conservation measures were all designed to provide a "soft landing" in the event of major and prolonged drought.

However, I believe there are facets to this coming challenge that present a clear and pressing need for the Commission to embark on an unprecedented consolidation effort to ensure that Arizona's water systems quickly gain the size and financial strength they will need in the next decade and beyond.

The attached presentation goes into a fair amount of detail on the challenges created by our continued Western drought; but a large reason for my concern is that NASA published a study in February 2015 that evaluated the four strongest climate models and what they portend for water supplies in the West.[2]

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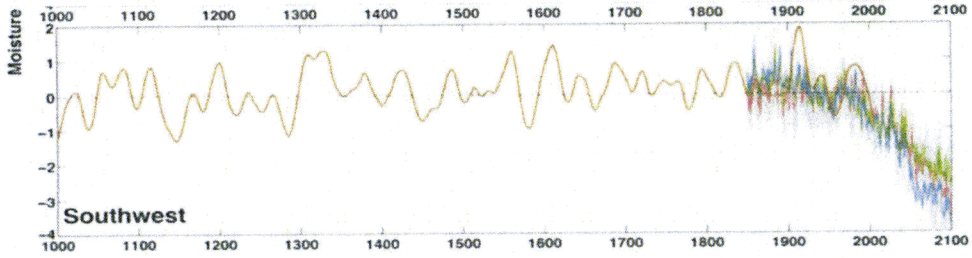
[1] See Attachment A, "The Energy Water Nexus from a Private Water Perspective"; Paul Walker presentation at Verde XChange Conference.

[2] See Attachment B, "Unprecedented 21st century drought risk in the American Southwest and Central Plains"; Authors Cook, Ault and Smerden, published by the American Association for the Advancement of Science.

This graphic tells the tale:



From Page 2 of Attachment B

The X-axis running along the bottom of the chart shows the years, AD. The Y-axis shows the moisture content in the soil using the Palmer Drought Severity Index ("PDSI). A 0-rating on PDSI indicates normal levels of moisture; negative numbers indicate drought conditions, positive numbers indicate wet conditions.[3]

The real problem that we face is driven by the NASA conclusions in three vital ways:

1) All four leading models were stress-tested by NASA and all four agree,
2) The PDSI "bottoms out" at -4. A -4 on the PDSI indicates extreme and prolonged drought, all four models show the West "bottoming out",
3) Thus, the West is going into a drought situation that is unprecedented in our recorded history.[4]

At this point, one sees the primary challenges: Reduced water supplies and prolonged drought put significant pressure on water and energy prices and economic growth. It is the next level of problem that my presentation attempts to address: What does all this mean for the hundreds of small, rural water companies in Arizona?

Without giving away the entirety of the presentation, the problems are these:

1) The Colorado River will soon go into curtailment and agriculture will see its CAP supplies cut by over 140,000 acre-feet a year,
2) People still want to eat food (as will cattle and dairy cows), thus agriculture has to revert to groundwater pumping,
3) Aquifers begin to decline due to the agricultural demand shifting from CAP-reliance to aquifer-reliance *at the same time* as a massive drought continues to reduce natural aquifer recharge,
4) Groundwater declines increase pumping costs, well pumps need to be lowered, many wells need to be drilled deeper, and some wells simply run dry,
5) The restrictions on the Colorado River dramatically reduce the role of hydropower as a "safety valve" to high electric pricing,[5] driving electric costs up *at the same time* that water pumping becomes more expensive due to "depth to water",

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[3] For more information on the PDSI, please see: http://drought.unl.edu/Planning/Monitoring/ComparisonofIndicesIntro/PDSI.aspx

[4] The reason the X-axis "only" goes back 1,000 years is simply that we do not have the ability to evaluate farther back. Universities throughout the West, notably the University of Arizona, have built data records relying heavily on dendrochronological studies (tree rings). For more information on dendrochronology (tree rings), please see: http://ltrr.arizona.edu/about/treerings

[5] Hydropower is not a large resource in Arizona, however it serves a vital economic function. It is relied upon to provide what it provides, i.e., incredibly low-cost power that is rapidly available, when power costs become extremely high. In short, by putting cheap, instantly available,

6) Many, many rural water systems will begin failing operationally and financially.

One hopes that the reader who has been patient enough to bear with the length of this letter thus far will be (if not bored) concerned.

But the history of Arizona is not one of ignorance, fear, or timidity in the face of a challenge. Our state was founded, planned, developed, and led by people of vision who recognized instantly that water was "going to be an issue."

This Commission is comprised of leaders up to the challenge: Each of you has addressed water issues directly – whether as Legislators, Commissioners, City Councilmembers, Members of the Central Arizona Water Conservation District; or one who has years of actual, real-world, experience operating a water system in the desert. Without any attempt at flattery, let me simply state the uncontestable truth: The Corporation Commission has never in history had a team of Commissioners so uniquely qualified to lead on water issues.

Furthermore, the Commission itself is staffed by people who have spent decades working on water issues. We can act now to avoid the worst effects of the drought we continue to endure, and that will continue to challenge us for the future.

I believe that the fundamental first step is embarking on an unprecedented effort to strengthen and consolidate Arizona's 282 water companies so that they achieve the size they will need to interconnect systems; emplace reclamation, reuse, and recharge; and invest in conservation, efficiency, and resiliency. Without question, there are many other things to be done, but the reality is that not many of the next steps can be done by small and financially challenged utilities.

The attached presentation graphically makes these points.

Thank you for your constant attention to Arizona's water challenges; I and the members of Responsible Water are available at any time to discuss this issue in more depth.

Sincerely,

Paul Walker
Chairman
Arizonans for Responsible Water Policy

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hydropower into the market at times of high pricing, hydropower "takes the top off" the market and holds prices down. For more information on hydropower's ability to reduce the marginal price of power in peak pricing conditions, please see: www.usbr.gov/pmts/economics/reports/TMEC0603.pdf

Paul Walker Surrebuttal Testimony

January 11, 2016

ATTACHMENT C

ORIGINAL

RESPONSIBLE RESIDENTIAL WATER CONSUMER

W05-00000A-14-0198

2014 JUN 20 P 3:50

AZ CORP COMMISSION
DOCKET CONTROL

May 8, 2014

Arizona Corporation Commission
DOCKETED
JUN 20 2014
DOCKETED BY

Commissioner Susan Bitter Smith
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

In Re: Acquisitions and Consolidations in Arizona's Water & Wastewater Industry

Dear Commissioner Bitter Smith:

Thank you for asking us to begin evaluating the need to consolidate Arizona's water and wastewater industry; the Arizona Residential Utility Consumer Office and Arizonans for Responsible Water Policy have begun a series of discussions on the issue and look forward to working with your office, and the Commission as a whole, on this issue.

The idea of incenting and encouraging consolidation in the Arizona private water and wastewater sector dates back to, at least, the late 1990s. On April 24, 1998 the Corporation Commission voted to establish "The Commission's Water Task Force" with the stated intent of "develop[ing] policies to address a wide variety of problems that private water companies and their customers face."[1] The Task Force conducted numerous meetings and issued a series of recommendations, including:

> "Reduce the number of small, non-viable water systems through new rules and procedures."[2]

The Water Task Force wrote, as justification for its recommendation to begin consolidating the industry:

> "Many of Arizona's water companies are quite small; the majority of them have less than $250,000 in annual revenues... many of these small companies are quite problematic. Most of the "problem" companies that the Commission must deal with are quite small. Because of their small base of customers, even quality managers of small companies may find it difficult to raise sufficient revenues to make needed capital investments."[3]

The Task Force concluded that "because of economies of scale, larger companies are likely to be more efficient. A larger company can consolidate the administrative aspects of many smaller "systems" thereby significantly reducing the overall cost of service. For these reasons, the Task Force agrees that reducing the number of small non-viable water systems is a desirable goal."[4]

The Water Task Force's report and recommendations were never acted upon by the Commission.

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[1] Interim Report of the Arizona Corporation Commission's Water Task Force, October 28, 1999, Page 3 [Docket No. W-00000C-98-0153]
[2] Ibid, Page 3
[3] Ibid, Page 4
[4] Ibid, Page 4

A decade later, in 2010, the Commission directed Commission Staff to open a "generic investigation which looks at how best to achieve the Commission's objectives with regard to encouraging the acquisition of troubled water companies".[5] Throughout 2011, the Commission hosted water workshops that explored the numerous issues facing Arizona's water industry. The 2011 workshop process led to no final report, no final recommendations, and no final decision by the Commission.

Which all begs the question: If, for over a decade, every interested person has concluded that Arizona needs to incent "the acquisition of troubled water companies", why has nothing been implemented?

The answer, we believe, is that no coalition has formed to evaluate, address, and mitigate the real and complex challenges that come with consolidating an industry. Those challenges are complex, and must be understood before one sets out to "find the right path" toward consolidating an industry with over 300 companies scattered throughout Arizona.

We shall endeavor to do so in this paper.

Pat Quinn
Director, Residential Utilities
Consumers Office

Paul Walker
Chairman, Arizonans for Responsible Water

Paul Walker served as advisor to Chairman Marc Spitzer at the ACC; worked on Governor Jane Dee Hull's negotiating and lobbying team during the Indian Gaming Compacts; and was on the staff of U.S. Congressman John J. Rhodes, III. Paul specializes in regulatory analysis, lobbying, and consulting. In addition, Paul was elected to the national board of directors of ConservAmerica – a 6,000 member Republican organization working to improve the environment through market-based policies at the national level. He chairs Arizonans for Responsible Water Policy – a trade group comprised of large water companies advocating for long-term water policy changes; and serves on the Arizona Power Plant and Line Siting Committee, a statutory board comprised of elected and appointed officials that determines the environmental and economic compatibility of power plant and electric transmission line applications. He served as a Captain in the Arizona Army National Guard and completed numerous military schools and courses; and he holds a Masters in Business Administration from Thunderbird – The American Graduate School of International Management.

Pat Quinn spent over 30 years working in the telecommunications industry before retiring as President of Qwest Arizona in 2008; prior to that position he had served as Vice President of Corporate Policy and Law, Director of Regional Regulatory Affairs, and Finance Director. Qwest was the regional operating company formed after the breakup of the AT&T system in 1984 and provided telecommunication services to the vast majority of Arizona residents. Pat is a veteran who served in the U.S. Navy, and has long been involved in a host of Arizona organizations, including: Greater Phoenix Leadership, the Homebuilders Association of Arizona; Arizona Town Hall; Tee AA and Phoenix Community Alliance. He earned his Master of Business Administration and Bachelor's degree in mathematics from the University of South Dakota. He was appointed as Director of the Arizona Residential Utility Consumers Office in January of 2013.

[5] Decision No. 71878, Finding of Fact 84, Page 84 [Docket No. SW-20445A-09-0077, et.al.]

RESPONSIBLE WATER RESIDENTIAL UTILITY CONSUMER OFFICE

About Responsible Water: Responsible Water is a trade group comprised of Arizona Water Company, Global Water, and Liberty Utilities. Together, our companies own and operate water and wastewater systems that serve over approximately 500,000 people in communities across Arizona.

Responsible Water is committed to working to make Arizona's water future more secure and more sustainable by working cooperatively with Arizona policy leaders to identify and implement new practices and approaches that strengthen the water industry – and thus, Arizona's ability to manage its water resources. By conducting no-cost seminars for small water companies, developing white papers and studies that explore water management and innovative approaches to regulation, and by providing free technical assistance to troubled utilities, Responsible Water is committed to improving the entire water industry so that Arizona can continue to be a growing, vibrant, and sustainable home for generations.

About the Residential Utility Consumer Office ("RUCO"): RUCO is a legislatively established governmental agency dedicated to representing the interests of residential utility ratepayers in matters before the Arizona Corporation Commission ("ACC" or "Commission").

Since establishment in 1983, RUCO has been actively involved in rate-related proceedings involving public service corporations providing electric, gas, telecommunications, water and waste water services. As a matter of policy, RUCO always intervenes and participates in rate cases involving Arizona's largest utilities. Intervention in the cases of smaller companies is decided on a case-by-case basis, with particular attention to the size of the increase sought, the rate history of the utility, and the availability of resources at RUCO. In addition to RUCO staff, consultants may assist in analyzing utilities' requests for changes in rates and preparing testimony

In addition to specific rate proceedings, RUCO is also heavily involved in high level policy decisions made at the ACC. RUCO approaches topics such as industry regulation, renewable energy, and cost recovery mechanisms with a balanced view that weighs near terms considerations and long-term outcomes. RUCO prides itself on being a thoughtful stakeholder that can guide the development of smart policies in a way that maximizes benefits to residential ratepayers and the utility system as a whole.

Definitions.

Acquisition Adjustment: An increase to utility rate base which reflects the cost of the purchase of the utility or the asset.

Regional Consolidation; The ability for the acquiring company to consolidate companies into regional or utility groups for purposes of having common rates, operations and management.

Integrated Consolidation: The ability for the acquiring company to consolidate all of their companies into a parent company with common rates, operations and management

ROE Premium: An. increase to the allowed return on equity as an incentive for certain investments. The theory is to provide a return *above the market level* in order to attract investment.

AUTHORIZED ROE + ROE PREMIUM = COST OF EQUITY

The Challenges of Consolidating an Industry

Pat Quinn, BS, MS, Mathematics
Paul Walker, BS, MBA, Business Administration

There are serious economic and regulatory issues that have to be addressed and evaluated before Arizona decides to move forward with consolidating its highly fragmented private water and wastewater industry. We will discuss different aspects of acquisition and consolidation later. The only way to address these issues is to go through them, one by one. This will require the Commission to develop a holistic policy framework that transitions rate setting from a model just based on cost causation to one that includes the enabling of consolidation.

We apologize, in advance, for the fact that many of these issues are only fascinating to people like the authors – we will try our best to avoid making the economic theories too dull or esoteric, but we must emphasize that the reality of Arizona's challenge necessitates a comprehensive understanding of the difficulty of meeting that challenge. The reader should bear in mind that <u>because</u> some of these issues are dull, complex, and esoteric, Arizona has not acted to address this challenge; only with understanding can Arizona solve this issue.

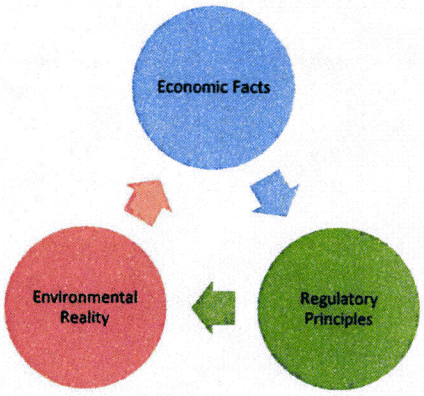
To begin the discussion we need to define the different types of consolidation. Generally we are talking about consolidation as meaning the acquisition of a smaller water or wastewater company by a larger water or wastewater company. This implies the mere acquisition, but not necessarily the incorporation of the smaller company into the large company, i.e., the smaller company still maintains much of its operational autonomy. The other type of consolidation is what we call "integrated consolidation"; with integrated consolidation, the smaller company is fully absorbed into the large company's operation. This can be done at a regional or total company level. This will be discussed more later.

This paper is divided into five sections:

Additionally, there are four attachments to this paper:

SECTION ONE: THE POLICY AND FACTUAL LANDSCAPE OF ARIZONA WATER

There are three major forces one confronts in the Arizona water industry:



Economic facts must be clearly understood, regulatory principles must be adhered to, and policies must address the environmental reality of Arizona's water supply. The economic fact that Economies of Scale exist provides an opportunity to better control costs and incent investment. This fact is well explained in a 1990 publication of the California Public Utility Commission: "Water Utility Risk and Return."

> "[S]mall water companies have special problems created by their lack of economies of scale and inaccessibility to external financing. The number of economic dichotomies between large and small water utilities warrant separate analyses and, ultimately, different ratemaking treatments."[6]

The economic fact that small companies face greater challenges in attracting capital creates a challenge for Arizona's water future; the fact is that most small Arizona water utilities rely on Contributions In Aid of Construction (CIAC) and Advances In Aid to Construction (AIAC) – and wind up with very little rate base, and very few options to access the investment market. As explained in Attachment 4, "Water Utility Risk and Return":

> "[T]he stability of the water utility business should provide comfort to creditors and equity investors seeking attractive investment opportunities with relatively low risk. However the small size of water utility offerings, relative to other utilities, tend not to generate interest among investment bankers. Consequently, most water utilities remain unknown except to a subset of the financial community such as insurance companies. Virtually all external financing is accomplished through private placement directly with investors, without use of an underwriter."[7]

The regulatory principles of "Cost Causation, Equity, and Sustainability" can be adhered to in an acquisition and consolidation policy. This will require the Commission to modify the current policy to encourage smart consolidation. Finally, the "Environmental Reality" of Arizona's water situation today, and all water forecasts for Arizona, provide a clear and compelling public interest in strengthening and consolidating this industry. We shall explore each of those issues in this section.

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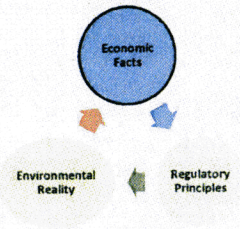
[6] "Water Utility Risk and Return", California Public Utilities Commission, April 1990, Page 1
[7] Ibid, Page 3



Economic Facts

One economic fact directly correlates to the question and benefits of consolidating the Arizona private water and wastewater industry: Economies of Scale. This term is fairly common, but it is important to ensure that it is understood at the outset.

Economies of Scale: Economies of scale mean that a firm's average cost decreases as its output rises.

> Example: The fixed costs of owning and operating a small water system include: the costs of the well and the pipes that deliver the water. Once those are in place, the costs are spread over the customer base. If the customer base grows, there are more people paying those fixed costs and they will each pay less.
>
> Example: The costs of running a customer call center include the cost of the building, the telecommunications services, and the employees. Once those are in place, the costs are spread over the customer base. If one company owns and operates numerous utilities, it can use the same call center to support each utility – rather than building and financing a call center for each utility on its own.
>
> Example: A utility requires not just the day-to-day operational staff; it also requires a management team to oversee the accounting, capital improvement plans, financing, environmental compliance and reporting, human resources, and investor relations. However, the management team that provides those services to a utility can provide those services to more than one utility – when it does so, it takes advantage of economies of scale because the incremental costs of providing that management to a second, third, or tenth utility are less than the costs of having each of those other utilities having its own, independent management team.

Thus, economies of scale means that "large water utilities are able to provide professional management and lower cost service because they spread the fixed costs of operations over more customers."[8] However, as we move forward in this paper the reader should bear in mind that the looming investments in water infrastructure, sustainability, and increased water supplies will exert dramatic upward pressure on rates. Thus, while economies of scale provide downward pressure on rates, Arizona's future is one of increasing investments, increasing costs, and thus, increasing rates for water customers.

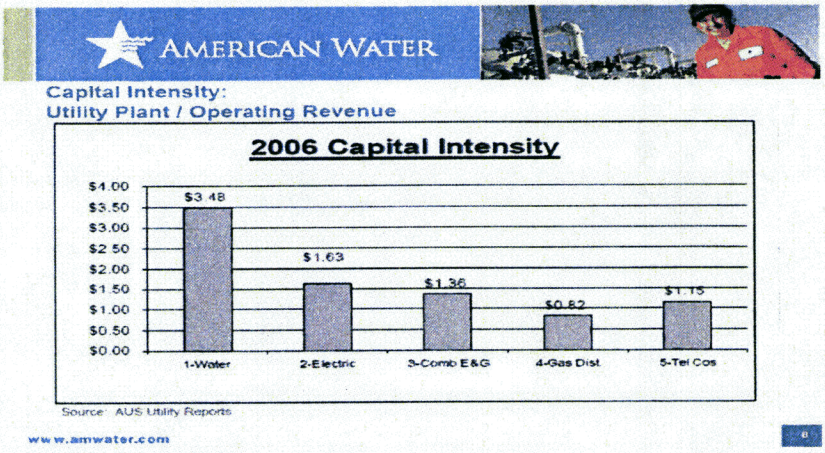
Small Firm Capital Attraction Challenges: Smaller entities have fewer opportunities to access the investment market.

As CPUC explained, small firms "tend not to generate interest among investment bankers" therefore the majority of their financing comes from the owners and from any developers who build in the service area (through CIAC and AIAC.) The resultant capital structure from such an approach winds up producing very

[8] Ibid, Page 19

little rate base – it is startlingly common in Arizona to find small water utilities with little to no rate base. That we have become accustomed to it is more alarming than the very fact itself. Arizona needs to realize, literally right away, that: "The financial structure of the company to a great extent determines financial risk."[9]

Many companies with little to no rate base face extreme financial risk – they have no rate base to produce a return on equity, and are simply operating margin entities in a business that faces significant environmental challenges and very high capital intensity. Capital intensity is the measure of: How much investment in plant is required to produce $1 in additional operating revenue.



To summarize then, economies of scale can reduce the average cost per customer; but many small water utilities in Arizona have very challenging financial profiles that make them hard to invest in, and make it hard for their current owners to attract needed investment. Because of the latter challenge, owners rely on developers to fund their utility needs – thus further weakening their financial structure:

> "Advances and contributions spread out the utility's funding requirements for growth and development in the service territory. These sources of funds are not included in utility rate of return calculations because these sources of capital are not provided by company investors. Nonetheless, operational risks increase as the percentage of contributions increase for the utility. For example, assuming a 10% return on rate base, a utility with $100,000 in plant, of which 40% is contributed, can only generate a return on investment of $6,000. If the utility had used debt and equity capital, it would be able to earn $10,000. The operational risk is highlighted when revenues change due to voluntary conservation and/or mandatory rationing."[10]

In fact, in many cases in Arizona the CIAC (or the AIAC that reverts to CIAC due to lack of growth) becomes so large that it subsumes the owners' investment. Building on the CPUC example above, if the utility had received $40,000 in Advances, but the growth didn't occur as expected and thus only $10,000 of the AIAC was repaid, $30,000 in "CIAC" would be assigned to the rate base – cutting the rate base from $60,000 in the CPUC example, to $30,000; and cutting the return from $6,000 to $3,000. This example is not hypothetical, in fact it is commonplace among small Arizona water utilities – thus further worsening their capital structure, increasing their risk, and making their acquisition more difficult for potential buyers.

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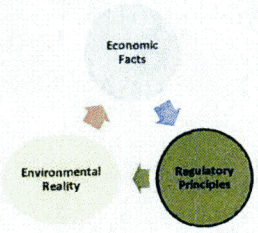
[9] Ibid, Page 2
[10] Ibid, Page 13

Regulatory Principles

There are three key regulatory principles that must be strictly adhered to should Arizona move forward with a policy and incentives to encourage consolidation of the Arizona water and wastewater industry: Cost Causation, the Equity Principle, and Sustainability. Cost Causation and the Equity Principle will be the most complex issues to explain to customers. This is why criteria for when and how to consolidate must be developed.



The reality is this: Consolidations and Acquisitions come with costs – and those costs must be recovered in a fair and manageable manner. However, there will be some cost savings that come from economies of scale that may reduce or mitigate these increased costs. Investors and customers are, quite literally, in the same position here: Both can benefit from a stronger, more consolidated industry, the key is to understand how to balance the costs.

Principle 1: Cost Causation – the customer who causes a cost should pay the cost.

Equality vs. Efficiency: Cost causation involves one of the most complex issues in economics, what Arthur Okun called "the big tradeoff". Economic equality means that no one gets an unfair advantage over another – which is obviously subjective because everyone has an opinion on what constitutes "fair and unfair." Economic efficiency means that correct pricing signals are sent, and those incentives correlate to desired outcomes.

Principle 2: Equity Principle – no customer should be forced to pay more than what is reasonable.

Rate Design: Cost allocation is the purpose of rate design – it is the process of determining how many dollars to collect from various customer classes for various utility services.

Just and Reasonable Rates: The rates set by the Commission must not be unduly discriminatory between customers or services. "Unduly discriminatory" means that the discrimination in pricing or incentives is tied to and supports some public interest, e.g., tiered water rates charge exorbitantly high rates for high use of water – much more than the incremental cost of providing high amounts of water – but those high rates are justified because they support the public interest of conserving water.

Subsidies: Generally, Commissions avoid providing subsidies ("subsidies" are defined here as: charging less than the incremental cost of the service to one group of customers, while charging more than the stand alone cost to another group of customers.)

Efficiency: Commission rates and incentives should give correct signals to customers and investors ("correct signals" are defined here as: promoting the efficient use of resources, and allowing customers and investors to manage and plan their budgets.)

Principle 3: Sustainability – the utility must receive enough money to stay in business and continue providing safe, adequate, and reliable service.

Sufficiency: Utility rates and incentives should be sufficient to allow the utility to collect its legitimate costs. At the same time, decreases or increases in risk should be recognized and applied in a symmetric manner to the company's authorized rate of return in order to establish fair compensation to shareholders.

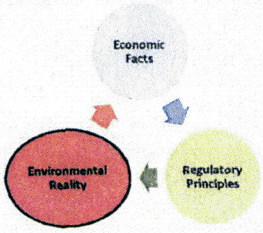
Transparency: Commission rates and incentives should be understandable to customers and the utility.

Stability: Commission rates and incentives should avoid rate shock to customers, and should promote revenue stability to the utility. Commission rates and decisions must provide price and investment signals and the Commission must recognize that those signals will affect behavior, but it may take some time to do so.

If done correctly, establishing a consolidation enabling framework for Arizona water companies will integrate these three principles in a more holistic way. First, the true cost of one's water system may be hidden from customers if needed upgrades are not made or systems are neglected. Second, equity is a principle that is dependent on one's time horizon. In the medium to long run, the consolidation of two water systems may bring resiliencies and efficiencies that overcome short run inequities. Third, sustainability comes when the true long run costs of operating a successful water system are recovered and allocated within a system that is resilient and efficient. Smart consolidation between companies should leverage all three of these principles in a way that delivers long-term net benefits to all ratepayers involved.

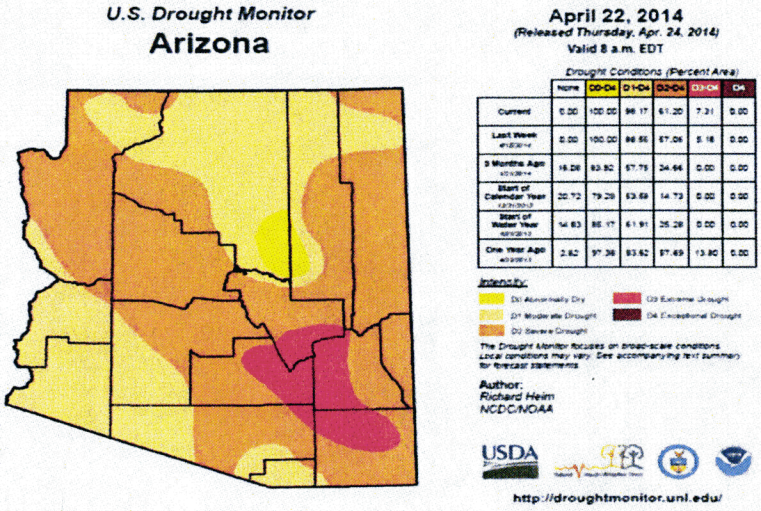
Environmental Reality

All of the economic facts and regulatory principles must, in the end, deal with and address reality. And Arizona's water reality is complicated. Arizona water leaders have worked hard on water management since the 1922 Colorado River Compact. The Central Arizona Project, the 1980 Groundwater Management Act, the Central Arizona Groundwater Replenishment District, Commission-sanctioned Tiered Rates, Water Banking, and more environmentally sound development have created a vast network of infrastructure and programs to better manage Arizona's water supplies; but ongoing drought combined with population growth will continue to demand larger and larger investments and increasingly sophisticated water monitoring and management.

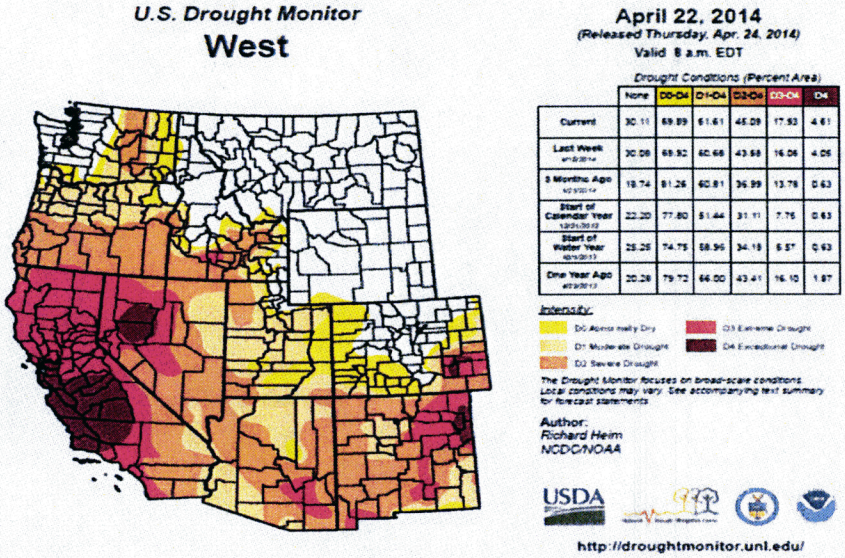


Arizona has relied for decades on affordable CAP water – which provides water for agriculture and communities, and the Colorado River dams which provide affordable hydropower that both offsets CAP costs, and provides reliable and affordable power to rural Arizona. But Arizona remains mired in drought, and the drought goes beyond the Colorado River – it covers nearly all of Arizona and droughts are very hard on small water companies – pumping costs increase, CAGRD costs increase, development gets more costly and complex. Drought can be managed – but at a high cost financially, managerially, and technically.

Arizona Remains in a statewide drought

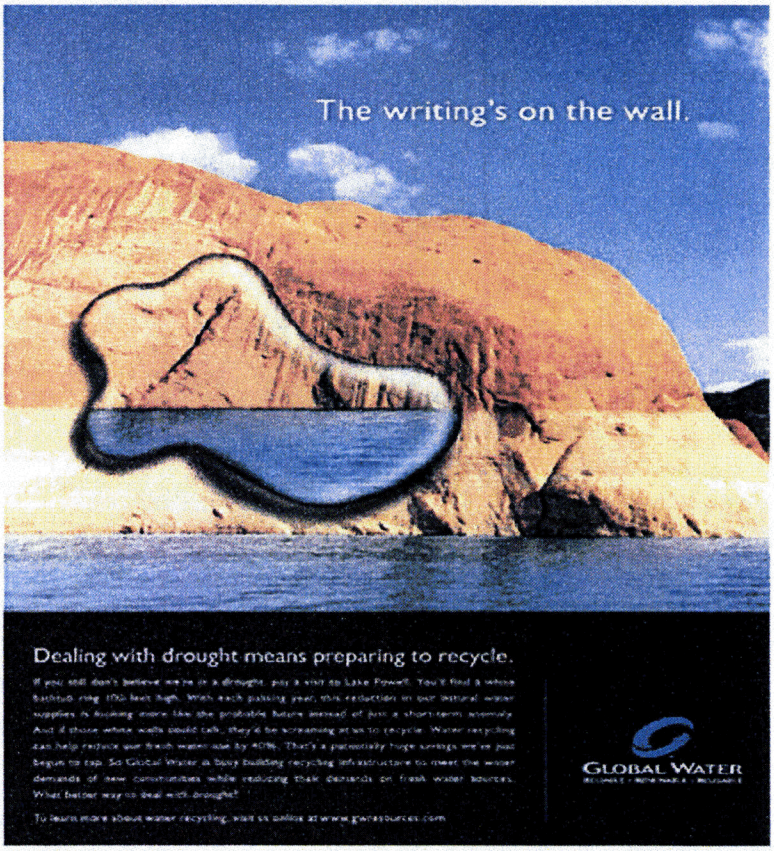


The drought affects not only Arizona – in fact, the entire west is gripped in a historic drought. Today, four of the seven Colorado River states are covered, 100%, in drought conditions, and Utah is almost entirely in drought. The Colorado River is in a historic drought and curtailment of the water deliveries that Arizona relies on for CAP, agriculture, and groundwater recharge seems likely to occur sooner, rather than later.



Most experts agree that the [Colorado River] basin will get even drier

"Already, the drought is upending many of the assumptions on which water barons relied when they tamed the Colorado in the 1990s... Lake Mead currently stands about 1,106 feet above sea level, and is expected to drop 20 feet in 2014. A continued decline would introduce a new set of problems: At 1,075 feet, rationing begins; at 1,050 feet, a more drastic rationing regime kicks in... Should Mead continue to fall, Arizona would lose more than half of its Colorado River water... That would have a cascading effect. The Central Arizona Project would lose revenue it gets from selling water, which would raise the price of water to remaining customers, leading farmers to return to pumping groundwater for irrigation – exactly what the Central Arizona Project was supposed to prevent."[11]



The Colorado River drought also affects the Glen Canyon and Hoover Dams

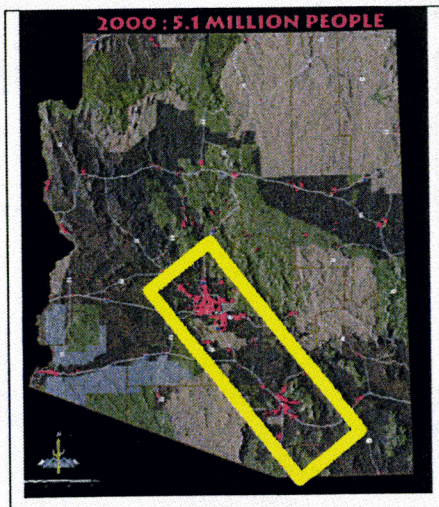
"At Glen Canyon Dam, the Bureau of Reclamation plans to reduce releases by 750,000 acre-feet for the coming year, a historic low. The iconic Hoover Dam is experiencing a 14-year drought, the worst in the last 100 years... For Western [Area Power Administration], insufficient water results in not having sufficient hydropower to meet its contractual obligations. Under many of [Western's] contracts, [it] must purchase more expensive power on the market to meet [its] obligations."[12]

[11] The New York Times, "Colorado River Drought Forces a Painful Reckoning for States", January 5, 2014
[12] EnergyBiz Magazine, "Powering a New Frontier", January/February 2014

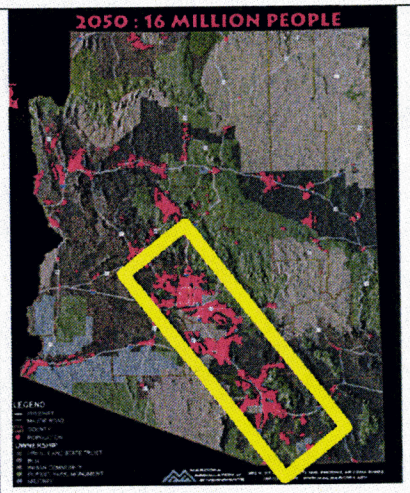
Arizona's "growth corridor" has an unmistakable correlation to Arizona's private water industry

The best estimates of Arizona's likely future growth are unmistakably correlated to the areas served by Arizona's private water industry – the reason is simple: Most private water companies exist outside of town and city limits, because towns and cities usually have their own, municipal water system. Many people choose to live outside of towns and cities, when growth moves beyond an existing town or city limit, it invariably runs into areas served by private water companies.

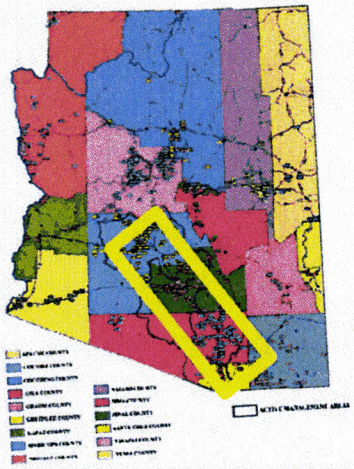
Arizona's Growth Corridor and Arizona's Private Water Utilities



Arizona Population c. 2000



Arizona Population c. 2050 Estimated by Maricopa Association of Governments



Map of Arizona's Private Water Companies

The Arizona Department of Water Resources (ADWR) issued a milestone assessment of Arizona's water situation in January of 2014, "Arizona's Next Century: A Strategic Vision for Water Supply Sustainability." We are pleased that ADWR's Director, Michael Lacey, asked us to attach Arizona's Next Century to this white paper – Attachment 1 is that report's Executive Summary. The entire report, 60.58 MB, can be found on ADWR's website at this URL:

http://www.azwater.gov/AzDWR/Arizonas_Strategic_Vision/documents/ArizonaStrategicVisionforWaterResourcesSustainability.pdf

In Arizona's Next Century, ADWR highlights several "strategic priorities" for Arizona:

1. Resolution of Indian and Non-Indian Water Rights Claims
2. Continued Commitment to Conservation and Expand Reuse of Reclaimed Water
3. Expanded Monitoring and Reporting of Water Use
4. Identifying the Role of In-State Water Transfers
5. Supply Importation – Desalination
6. Develop Financing Mechanism to Support Water Supply Resiliency

Clearly, a consolidated, strong water industry in Arizona would be able to address Points 2, 3, and 6. And a consolidated, strong water industry could play a key role in financing and supporting Points 4 and 5.

Because of Arizona's water challenge, ADWR states that: "The current challenge facing Arizona is that although the State has an existing solid water management foundation, water demands driven by future economic development are anticipated to outstrip existing supplies. Additionally, the availability of surface water supplies have been reduced in recent years as drought conditions have been experienced locally and throughout the Colorado River Basin."

Summary

The growing, and worsening, drought in the U.S. west will require vast investments in Arizona's water infrastructure. It has been known for some time that the 1922 Colorado River Compact allocated the River's water supplies based on abnormally high River flows – there is not 15 million acre-feet per year in that River, it's more like 13 million but even that flow is highly volatile as the West is now, painfully, realizing.

ADWR's strategic priorities for the 21st Century make it very clear that Arizona is facing a high-cost future: Desalination will be a multi-billion dollar effort, and Arizona's private water industry will need to be large enough and strong enough to contribute hundreds of millions of dollars to that 21st Century effort.

ADWR's final strategic priority, "develop funding mechanisms to support water supply resiliency" is not only essential to desalination but also to ADWR's other strategic priorities. Expanding the use of reclaimed water, increasing water monitoring and conservation, and in-state water transfers all will come at great cost. Thus it is imperative for Arizona and all Arizona residents, that the Commission strengthen and consolidate the private water sector to meet the 21st Century water challenges we face as a state.

While economies of scaled will provide downward pressure on prices and rates, it must be clearly understood that consolidating and strengthening Arizona's water infrastructure will be a massively expensive effort that will take decades. So, economies of scale and consolidation will not result in decreasing rates in the near term – they will only provide downward pressure as Arizona deals with, and invests in, its 21st Century water challenge. Drought, volatile and diminished Colorado River supplies, desalination, reclaimed water and increased monitoring and conservation efforts are each costly, and all necessary and prudent to secure Arizona's water future.

SECTION TWO: A CLEAR AND COMPELLING PUBLIC INTEREST

Because Arizona faces significant, increasing, and costly environmental challenges due to water scarcity, it must evaluate the ability of the private water and wastewater industry to meet those challenges over the long-term and to do so in an affordable way for utility customers. Arizona's private water industry lies in the path of Arizona's future growth, therefore the Commission must play an active role in planning for Arizona's water future.

Economies of scale and future water scarcity and increasingly strained sources are critical factors that support the consolidation of the highly fragmented Arizona water industry. There are over 300 firms providing private water and wastewater services in Arizona – and as the environmental challenges and costs mount, more and more of those firms will become non-viable and more and more will descend into economic crisis. The Commission has, since 1998, been concerned with the viability of small water systems; and with the drought and the long-term change in Colorado River supplies, the time has come to address consolidation of the industry.

At the outset, it is imperative to recognize that not all small systems have to be consolidated – the Commission's interest is simply in ensuring that each water and wastewater system has adequate financial, managerial, and technical ability to provide safe, adequate, and reliable service both today, and into the future. To that end, the Commission should amend its Annual Report rule to also require water and wastewater systems to include the following data and any other information the Commission deems necessary:

- Regulatory compliance currently (ADWR, ADEQ, ACC, ADOR, and County and City compliance).
- Regulatory issues the company foresees in the next five years.
- Basic Financial Ratios: DSC and TIER, which measure liquidity and viability.
- One year Capital Improvement Plans that estimate:
    - the capital improvements (for repair and replacement of existing infrastructure), and
    - development that the utility believes will occur in that timeframe (with the utility's plan to cover those costs through MXAs, HUFs, and/or debt and equity financing.)

The Commission needs to also establish and levee sanctions and fines for willful failure to comply with regulatory requirements and standards. This will help encourage companies to establish adequate financial, managerial, and technical ability to meet the challenges of today and tomorrow.

However, simply relying on the "stick" of regulatory oversight is not likely to be sufficient. The Commission should focus on improving the regulatory and financial climate for small water companies to ensure they are filing frequent rate cases, building their financial strength, and preparing for a more challenging water future.

Responsible Water has launched efforts to aid small, troubled water companies to assist them with regulatory compliance and financial challenges. Additionally, Responsible Water is launching a free water seminar series to provide small water companies with detailed briefings on regulatory issues, compliance, and financing. The Commission and the Department of Water Resources are also participating in the seminar series – thus tying outreach and information to the "carrot" and "stick" and increasing the ability of small water companies to meet Arizona's 21st Century water challenge.

The public interest is well outlined in a memorandum provided to us from Steve Olea, Director of the Commission's Utility Division:

> "Unfortunately, it is not uncommon for small, troubled water systems to develop compliance issues with federal, state, or local requirements. Very often, these troubled systems lack the financial capacity or the technical expertise to correct these issues. When such a small, troubled system is acquired by a large, well operated, and well financed water system, the potential for significant benefits to ratepayers is obvious. This is the type of consolidation that should be encouraged, and the Commission's acquisition policy should be tailored to these types of situations."

SECTION THREE: PATH TO CONSOLIDATION

Consolidation is often used to define many different types of outcomes. To begin the discussion we need to define the different progressions of consolidation. The first and most typical consolidation is a simple acquisition - where a larger company simply acquires a smaller company. This may bring some economies of scale to the acquired company.[13] However, for the most part the smaller company is still largely autonomous with its own rates and operations.

The next progression of consolidation occurs when the smaller acquired company is merged with other regional holdings of the large company. This "regional consolidation" can result in more economies of scale. This is accomplished through geographically combined rates, operations and management. The final progression is when the larger company is allowed to merge all of their holdings into one company and establish rates that apply to all their customers. This "integrated consolidation" allows for the greatest economies of scale (and scope.) To allow for this consolidation to progress in the public interest of ratepayers, a strong set of criteria needs to be developed to intelligently transition from small acquisitions to regional consolidation, and then, if justified, full integrated consolidation.

The process leading to full scale consolidation is a long one and it fundamentally starts with the basic acquisition. Therefore, the key to realizing the end goal of large scale integrated consolidation is to first encourage acquisitions.

There are four main enabling policies:

1. Rate base acquisition adjustments
2. Allowance of regional consolidations
3. Rate of return on equity (ROE) premiums
4. Cash flow/operating margin inducements

The first two policies are specific to the situation and company - therefore limiting the scope and the ability to streamline their application. However, ROE premiums and cash flow inducements can be setup for statewide application through sliding scale mechanisms and/or qualifying criteria such as class of company being taken over, water loss thresholds, certain financial metrics, etc. The ability to possess a regulatory toolkit that can be customized when need be or streamlined when the situation calls for it will enable more acquisitions and thus deliver integrated consolidation sooner.

Each policy tool will now be described in detail:

Acquisition Adjustment - <u>Strengthening Viability, Incenting Acquisitions</u>

An "Acquisition Adjustment" is a decision by a public utility commission to include some or all of the acquisition cost of a company into the company's rate base. Most small water companies have very small (and in many cases, non-existent) rate bases.

This occurs because of several factors: First, oftentimes the original plant has simply been fully depreciated over time; Other times, these companies don't have the financial resources to build their infrastructure so

[13] And perhaps also economies of scope if the acquirer is, for example, an integrated water and wastewater company and it acquires a strictly water company.

they rely on developers to build and finance the utility plant – meaning it becomes CIAC and is excluded from rate base; Finally, very frequently the company does invest in plant and repairs, but the developer CIAC is so large that it simply negates the owners' investment. In each of those cases, the company's book value is virtually nothing; but its service area and operating revenues have financial values that support an acquisition price well above book value.

However, the buyer of the company has no way to recover the acquisition price if it is not included in rate base. Sometimes, that sunk cost is adequately compensated by the opportunity to grow the acquired entity or simply through the revenue stream from the acquired company. An example of that sort of acquisition is EPCOR's acquisition of Chaparral Water in Fountain Hills. EPCOR paid an acquisition cost approximately 30% higher than Chaparral's book value, but the economics didn't necessitate an acquisition adjustment.

That example comes with a huge caveat – Chaparral Water was, by all accounts, a successful, capable, well-managed company with more than adequate financial, managerial, and technical ability. What Acquisition Adjustments and a Consolidation policy must address is companies that aren't viable, or are in danger of falling into crisis because they lack the financial, managerial, and technical ability to deal with current and looming issues (such as, e.g., Arizona's drought.)

There are two sources the Commission and the Courts must consider when determining the justness of an acquisition adjustment – Judge Learned Hand, one of America's greatest jurists, in the 1943 *Niagara Falls Power Co.* decision, and Professor James Bonbright, who wrote "Principles of Public Utility Rates".

Judge Learned Hand in *Niagara Falls Power Co. v. Federal Power Commission*[14]

> If the rate base were to be set at the price paid by the new purchaser, then "the [company] who does not sell is confined for [its rate] base to [its] original cost; [the company] who sells can assure the buyer that [it] may use as a base whatever [the buyer] pays in good faith. If the [seller] can persuade the buyer to pay more than the original cost the difference becomes a part of the [rate] base and the public must pay rates computed upon the excess. Surely this is a most undesirable conclusion."
>
> - *Niagara Falls Power Co. v. Federal Power Commission*, 137 F (2d) 787, 793 (1943)

Thus, Judge Learned Hand's view is: If the Commission simply allows any cost above original cost to be included in rate base, the seller will "assure the buyer that [it] may use as a base whatever [the buyer] pays in good faith." This will increase sales, but it will do so by changing the economics so that buyers become more indifferent to the purchase price, and sellers realize that the regulatory price constraint no longer exerts a downward force on the price they ask.

Professor Bonbright, in "Principles of Public Utility Rates"

> "[I]nvestors are not compensated for buying utility enterprises from their previous owners... Instead, they are compensated for devoting capital to the public service."
>
> – *Chapter XII, "Original Cost versus Subsequent Acquisition Cost" section.*

[14] As cited in "Principles of Public Utility Rates" (Chapter XII, "Original Cost versus Subsequent Acquisition Cost" section.)

> "The foregoing conclusion is subject to revision if the transfer of the properties to their present corporate owner was an essential, or at least a desirable, part of a program of integration, justified in the public interest for the purpose of securing operating efficiencies that would offset any unavoidable excess in acquisition costs over original costs. In such a situation... a claim by the [purchasing] company that its purchase of the acquired properties was, in effect, a devotion of capital to the public service, cannot be dismissed as without merit."
>
> - *Ibid*

> [In such a situation, the purchasing] "company may properly receive an opportunity to prove its claims, although difficulties of proof are serious. Proof should be more readily adduced with respect to mergers and acquisitions, the terms of which have first been cleared with the regulating commission after a full public hearing and investigation."
>
> - *Ibid*

Thus, Bonbright's view is the acquisition cost is <u>not</u> a *per se* contribution to the public service warranting a return – <u>unless</u>:

1) The acquisition was justified in the public interest, and
2) The acquisition costs allowed were set after a full public hearing and investigation.

Therefore the Commission should not do what Judge Hand warned about, it should not "simply allow any cost above original cost to be included in rate base". It should follow Professor Bonbright's pathway to consider whether "the transfer of the properties to their present corporate owner was an essential, or at least a desirable, part of a program of integration, justified in the public interest" by evaluating such claims through the hearing process.

This view is also reflected in Mr. Olea's recent memorandum on acquisitions:

> "The Commission should not provide ratemaking incentives for consolidation simply for the sake of consolidation. In order for an incentive to be appropriate, the water company seeking the incentive must show that the consolidation **will provide clear and tangible benefits to ratepayers in an amount that is at least equal to the proposed incentive.** Furthermore, an incentive should not be awarded unless the purchase price is the product of an arm's length negotiation. The fact that a consolidation may provide benefits to the respective systems' shareholders/owners is not a factor that should support award of an incentive." [Emphasis added]

While we wholeheartedly agree with nearly everything Mr. Olea states in that paragraph, we caution the Commission on the highlighted text: Quantifying the benefits of consolidation to determine if they are "at least equal to the proposed incentive" is not possible, and with all due respect to our friend and colleague, that effort does not address the real reasons for consolidation.

The U.S. Drought Monitor shows the severity of the West's and Arizona's drought. It is now known, for certain, that the Colorado River was over-allocated and that the River is more volatile than anyone anticipated. Arizona has been in persistent drought conditions for over a decade and it appears that rain and snowfall are now more volatile and will remain so, whatever the cause.

ADWR is correct in stating the need for significant increases in water monitoring, conservation, reclaimed water reuse, and the need to begin laying the groundwork for desalination. Those are vastly expensive

individual elements – and yet, Arizona needs to take all those steps and begin doing so today, Arizona is at the end of the "cheap water" era and at the forefront of a world in which water is more scarce, more valuable, and more expensive.

Consolidation and economies of scale will not continue the era of cheap water – they will simply smooth the path to the future value and cost of water in Arizona.

Consolidations will be very unlikely to "pencil out" in the near term – because the cheapest course of action in the near term is always to do nothing. But over the longer term, within the next decade and certainly beyond that water is going to become expensive and will require highly sophisticated, financially strong water management companies. That is the true benefit from consolidation – and that should be the test the Commission applies when considering consolidations and acquisition premiums.

The Commission should evaluate applications for acquisition adjustments on a case-by-case basis, but it would be well served by establishing that there is a compelling public interest in seeing the water industry strengthened through a program of acquisitions that lead to consolidation.

The Commission should adopt an acquisition policy similar to those of Pennsylvania's Public Utility Commission.[15] Pennsylvania's policy lays out a few major points:

- The intent of the policy is to increase mergers and acquisitions to achieve regionalization.
- Each acquisition must serve the public interest.
- Acquired systems are below a certain size (3,300 connections), and the acquired systems was:
    - Not viable;
    - In violation of statutory or regulatory standards concerning the safety, adequacy, efficiency or reasonableness of service and facilities;
    - Failing to comply, within a reasonable period of time, with any order of the Department of Environmental Protection or the Commission.

Here we must note that the above criteria from Pennsylvania should *not* be construed as *requiring* each of those elements. To do so would be to instantly create an incredibly perverse and dangerous incentive for small systems to ignore statutes, regulations and orders. The Pennsylvania model simply lays out three criteria, any one of which (combined with the prerequisite limit on system size) can be evidence of "public interest" in the acquisition and thus the awarding of an acquisition adjustment.

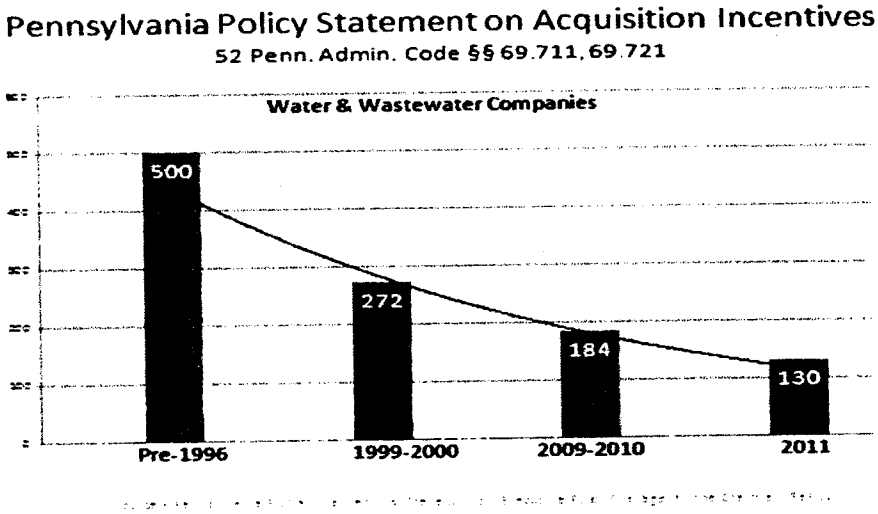
Pennsylvania also allows an ROE premium to be combined with the acquisition to address and incent "associated improvement costs." Meaning that, if the acquired utility has significant investment needs, the Pennsylvania PUC can provide an ROE premium to make the acquisition of the troubled system even more attractive.

In an interview in Arizona Regulatory Reports, Pennsylvania PUC Chairman Robert Powelson explained that Pennsylvania's "policy of encouraging regionalization and consolidation via inter-agency cooperation and acquisition incentives has resulted in improved water quality and service reliability for many customers throughout our state". Such a result is by itself meaningful, but Mr. Powelson also explained that "customers

[15] Attachment 3

who were previously faced with chronically non-compliant service from small, marginally viable providers" were now seeing improved quality, reliability, and safety in their utility service.[16]

That same article provided the following graph which demonstrates exactly how effective the Pennsylvania policy has been in incenting consolidation:



Regional consolidations – authorizing the unification of geographically close systems

It is quite possible that a company could acquire a smaller company that is situated in close proximity to some other companies they own. These companies could for various reasons be consolidated into a regional entity with common rates, operations and management. This could occur if there were common facilities, shared water supply or potential economies of scale. For example, maybe the newly acquired company has a well that can pump more water than is needed and the neighboring company faced a shortage of water. It may be more cost effective to run pipe from the producing well to the other company's system than to drill new wells. There are many other examples of why regional consolidation makes good business sense, most of which are so obvious that they needn't be repeated here.

Rate of return on equity (ROE) premiums

To narrowly tailor the ratemaking incentive to the behavior that the Commission wants to encourage, the Commission could consider specific risk adjustments to the acquiring company's return on equity ("ROE"). The risk adjustment to the ROE could be limited to the system improvements (once completed) that are needed either to bring the acquired water system into compliance or to address quality of service issues, similar to Pennsylvania's "associated improvement costs" reason for an enhanced ROE.

[16] Arizona Regulatory Reports, Issue 11-4, August 2011

Focusing on the ROE in this manner more narrowly tailors the ratemaking incentive to the behavior that the Commission would like to promote: the acquisition of smaller, troubled water companies by larger, well managed companies **and** the subsequent completion of system improvements.

Under this approach, the purchase price in the acquisition could be irrelevant; i.e., the ROE premium on its own could encourage and incent the acquisition without the need for an acquisition adjustment to rate base. The buyer would retain the incentive to negotiate the best possible purchase price (because he would know that the Commission would not increase the rate base by the acquisition premium), and the seller would have less reason to expect that an inflated purchase price could be simply passed on to ratepayers. At the same time, the buyer would have an incentive to purchase a troubled water company because he would know that the subsequent prudent investments that are necessary to improve the acquired system could be eligible for a higher ROE.

The precise adjustment to ROE would need to be determined in a rate case that is filed after the system improvements have been made. For example, if the ROE analysis in a rate case resulted in an ROE of 9 percent, and if the risk adjustment were 100 basis points, the ROE for the system improvements would be 10 percent, and the ROE for the remainder of the system would be 9 percent. The Commission may also want to consider whether the system improvements would continue to be eligible for an adjusted ROE in subsequent cases.

It is important to recognize that both of the ratemaking mechanisms discussed herein (the acquisition premium and the ROE adjustment) will result in higher rates.

Cash flow/operating margin inducements

The water and wastewater industry can only be consolidated by a) making companies viable, and b) incenting the acquisition of non-viable or challenged utilities. This view was precisely espoused in the Commission's 1999 Water Task Force report, and it was repeatedly stated in the Commission's 2011 Water Workshops. Very often in the review of acquisition policies the former point is forgotten, i.e. that strengthening viability is an essential tool in consolidating the industry.

> "[S]mall water utilities are clearly more risky than large water utilities and theory would support the notion that the required return on investment should be higher for small water than for large water companies."[17]

By strengthening the viability of water and wastewater utilities, the companies become economically attractive without the need for an acquisition adjustment. Encouraging friendly mergers and acquisitions by ensuring financial viability is likely to be a lower cost path toward consolidating the industry and achieving economies of scope and scale.

The Commission's recent decision to consider adjusting utility classification revenue thresholds to account for inflation is likely to be useful in this regard, because it is likely to make rate case filings less costly and simpler for small and medium-sized water and wastewater utilities. A second step the Commission should consider is increasing the operating margin that is provided to utilities that lack rate base, as is the case for most small systems. A range should be established by the Commission after careful consideration. Criteria

[17] "Water Utility Risk and Return", Page 20

should be developed to allow the Commission to have the flexibility to set the percentage on a case by case basis. Currently, the Commission allows operating margins from 5 to 20% (although the authors' experience is that the margin is usually around 10%). By way of comparison, in California, the smallest water utilities there – the Class C and D companies – receive operating margins of 20.73% and 22.08% respectively.[18]

The California position is supported by its determination that "a small water utility's earned rate of return is significantly greater than that of a large water utility. Small water utilities also face greater operating risk and much greater regulatory risks than large water utilities."[19]

The key consideration here is that an operating margin is not the same thing as a rate of return – indeed one look at the California Public Utility Commission's most recent order on rates of return and operating margins shows that the operating margin is about twice as large as the rate of return. To many people that will be bewildering – but what one must remember is that an operating margin is not the "return" for the investors and owners of a utility, it is simply what they have left after paying their operating expenses. Their operating margin is what they have available to deal with any operational or financial challenge – the California PUC explicitly takes "into account the high operational risks faced by Class C and D water utilities" and grants them operating margins nearly twice the size of a traditional rate of return – the reason is that a key "factor contributing to small water utility operating risk is their very high operating expenses to operating revenue factor."[20]

Again, bear in mind that a small system using an operating margin is, by definition, a system without significant rate base – it lacks financeable assets, thus it must operate on a cash flow basis. Any significant operational or financial challenge must be dealt with in cash, not financing. Therefore it is essential that operating margins for small systems be increased to levels at least similar to those in California's regulated industry.

Those first two steps, adjusting utility classifications to account for inflation (thus reducing the time and expense of rate case filings), and providing a healthy operating margin; will dramatically improve the ability of Arizona's small water and wastewater providers to deal with the environmental and regulatory challenges that lay in their near future.

Those steps will incent small water and wastewater utilities to file rate cases – allowing the Commission to begin getting a good look at the industry as it actually exists... Most of these systems haven't filed a rate case in decades, and the Commission frankly has no idea what their situation and strengths may be. By incenting the filing of rate cases, the Commission will get a real look at the small water situation in Arizona.

The effect of those two steps will be to make the industry healthier and more transparent. Both are essential to dealing with Arizona's water challenges, and to beginning to consolidate a highly fragmented industry.

Acquisitions are hampered not only by the lack of an acquisition adjustment incentive and the inability to consolidate rates (more on that later); they are also greatly hampered by the fact that many small systems are financially unhealthy and there is no real way to evaluate a company's position before one makes an offer and gets access to its books and records. Rate cases solve both those challenges and will make it easier for

[18] See Attachment 2
[19] "Water Utility Risk and Return", Page 1
[20] Ibid, Page 16

consolidators to evaluate and identify good acquisition opportunities, and to use real information to evaluate and negotiate a fair price.

Before concluding this section, we must highlight the fact that in Arizona, many small water companies have demonstrated very significant challenges interpreting and navigating the Corporation Commission's rate case process. This is not an indictment of the Arizona Commission, it is a common problem: "Many small water utilities have little or no contact with the Commission until they experience major fiscal or operational difficulties." That quote describes Arizona and many other states, but it is from "Water Utility Risk and Return" published by the California PUC, describing California's regulatory climate.[21]

Therefore we urge the Commission to consider establishing an Ombudsman office – staffed with an accountant, an engineer, and an attorney. The Ombudsman office would have two missions: First, to assist small companies after they file a rate case or a financing application; and second, to conduct outreach to the small water industry and to customers of small water systems to explain the Commission and its processes. They would not be there to represent the company but to assist them through the process. All too often, companies and customers are as confused as anyone by the Commission's work. That is in no one's interest.

Those steps, if combined with a Commission policy allowing rate consolidation, will lead to significant consolidation.

Should the Commission wish to further incent rate case filings, it could consider an incentive along the lines of this, again from "Water Utility Risk and Return":

> "For whatever reason, many small utilities do not come in for needed rate increases. Allowing automatic rate adjustments which could be set to an index would allow the utility to recover those expenses that are out of the control of the utility. Therefore, the recovery of lost or gained revenues are not adjusted when the utility saves or wastes money and the stockholders will bear these gains or costs. Indexing will also preserve the incentives found with test year ratemaking."[22]

An example of such an adjustment would be a power supply adjustor – allowing those, on a case by case basis, but only after the company files a rate case and gets Commission approval, could provide an additional incentive to file rate cases, and could also reduce small water companies operating revenue risk.

[21] "Water Utility Risk and Return", Page 12
[22] Ibid, Page 23

SECTION FOUR: CONSOLIDATION OPPORTUNITIES

To achieve maximum economies of scale will require the Commission to begin consolidating rates within each utility, and consolidating the industry into larger more viable parent companies. These approaches will allow water systems to deal with unexpected costs and to attract capital on more reasonable terms. When one thinks about unexpected costs, most people think of well failures, but it also includes added and changed water quality regulations and standards, increasing costs for CAGRD and CAP water, and increasing power costs. Additionally, changes to water quality standards, as occurred in the case of Arsenic, have significant costs and effects on customer bills. Consolidation of rates among affiliated systems and consolidation of the industry itself can mitigate those impacts.

Rate Consolidation

The first component of consolidation deals with consolidating the rates of affiliated systems. The Commission has consolidated the rates of affiliated systems in the past – notably Liberty Water's McLain and Sunrise systems in Cochise County; and the Commission has also deconsolidated the rates of affiliated systems – notably Anthem and Agua Fria in Maricopa County.[23] . In both cases, the Commission determination centered on customer rate impacts.

The electric, gas and telecommunications industries have long recognized that under rate consolidation more people have better service at a reasonable price. Under rate consolidation the regulatory process is also less cumbersome and expensive to both the public and the company involved. Consolidation avoids multiplicity of rate cases for each individual system, and simplifies the handling of questions and complaints by the regulatory commissions. And it strengthens the ability of utilities to withstand regulatory changes, environmental challenges, and economic challenges by spreading those costs over a larger, common, group of customers, i.e., by taking advantage of the economic fact that economies of scale exist.

One difference between the electric, gas and telecommunications industry and the water companies that must be addressed is that the other utilities customers all share common transmission systems. It would be necessary for the Commission to determine what factors are applicable in the water and wastewater consolidation decision. Factors may include but not be limited to common water resources, i.e., same aquifer, or common utility management, i.e., shared plant, shared services, common management, shared staff or future need for shared water sources, i.e. CAP or other surface water that requires large treatment systems.

As mentioned in the previous section, in order to achieve a wide spread, significant consolidation of the industry, rate base acquisition adjustments, allowance for regional consolidations, rate of return on equity premiums, cash flow and operating margin policies that strengthen small water companies must become tools that the Commission utilizes to encourage regional and integrated consolidation. This would allow the Commission greater flexibility to pick the tool that best fits the situation.

[23] We note that recently, another development, Corte Bella, has petitioned the Commission to deconsolidate themselves from Agua Fria, thus continuing to deconsolidate a once-regional operation.

SECTION FIVE: SUMMARY AND RECOMMENDATIONS

In the final analysis, we believe that Arizona's environmental reality, and its expected population growth in areas served primarily by private water and wastewater utilities are sufficient justification for embarking on a Commission policy supporting and incenting consolidation of the private water industry. Arizona's water situation is not "dire" but it is, as it always has been, complex, challenging, and ever-changing. Knowing that the majority of small water systems lack financial and operational strength and knowing that Arizona's water situation is becoming more difficult is all the evidence the Commission needs to embark on a policy of consolidating and strengthening the industry before Arizona's population doubles in size.

But there are other benefits which we have also established in this paper: Customers will benefit from economies of scope and scale; the Commission will get a firmer grasp of the actual real-world financial and operational situation that small water companies face; the Commission will have greater oversight into the industry – and the industry itself will become much more transparent; and finally, Arizona residents will receive what Pennsylvania's PUC was able to attain for its residents: improved quality, reliability, and safety in their utility service.

Paul Walker
Chairman
Arizonans for Responsible
Water Policy

Pat Quinn
Director
Arizona Residential Utility
Consumers Office

ORIGINAL

OPEN MEETING AGENDA ITEM

ARIZONANS FOR RESPONSIBLE WATER POL

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AZ CORP COMMISSION
DOCKET CONTROL

October 16, 2012

Arizona Corporation Commission
DOCKETED
OCT 16 2012
DOCKETED BY

Arizona Corporation Commission
Docket Control
1200 West Washington Avenue
Phoenix, AZ 85007

In Re: Docket No. W-00000C-06-0149

Dear Interested Parties:

The attached is a revised version of Responsible Water's paper "Beyond Rate Shock & Regulatory Lag." Subsequent to our initial paper (Sept. 2012) we met and consulted extensively with Arizona Public Service and the attached, revised paper, better explains the decisions and rate treatment APS has received from the Commission over the past several years.

Our intent is not criticism of APS or of the Commission – APS faced a downgrade to "junk" status from its debt ratings agencies, it stock price was faltering, and its customers were faced with the choice between higher rates now, or receiving service from a company on the verge of financial crisis. The Commission worked with APS to resolve the situation – and APS worked with the Commission to achieve the policy goals of the Commission. Today, APS customers have stable rates that won't change much over the next five years. APS has the financial ability to plan and invest in Arizona's future – and that sort of utility strength is a prerequisite to economic growth.

Our point is that if the Commission can find ways to solve APS' situation, and benefit APS customers and Arizona when the numbers involved reached into the billions of dollars, and hundreds of millions of dollars flow through adjustors each and every year – then the Commission can find a way to enact a simple, tried, and proven mechanism that dramatically reduces rate case frequency, the size of rate hikes, and the regulatory lag that undermines water companies' ability to plan and invest in Arizona's future. And the primary beneficiaries of that step are the nearly 90% of Arizonans who told us in a statewide poll that small, annual rate hikes are easier for their family than large, infrequent hikes every few years.

Our customers, and our companies, need consistent regulatory policy – and just as it worked for APS, the Commission, and APS' customers, it will work for ours and for the betterment of Arizona's ability to get its economy back on track.

Sincerely,

Paul Walker
Chairman

ARIZONANS FOR RESPONSIBLE WATER POLICY

Moving Beyond Rate Shock & Regulatory Lag
How Distribution and Collection System Improvement Charges benefit customers, investors, and regulators.

October 2012

Abstract

Arizonans for Responsible Water Policy is a trade group whose members serve nearly one million people in Arizona. Our members operate water and wastewater systems in over 60 communities and have been actively involved in every water commission and study group in the state over the past 30 years.

In this paper, Responsible Water looks at the arguments used against DSICs and the wastewater form, the CSIC. We find that the arguments used against DSICs are often disingenuous, frequently hyperbolic, and in the end do not reflect the simple fact that well-regulated DSIC programs reduce rate case filings, streamline the regulatory process so that utility commissioners can focus on larger policy issues instead of "firefighting", and DSICs provide customers with manageable rate adjustments that almost never exceed a few dollars a month.

We close the paper with a recommended process for implementing and regulating DSICs, and by providing sample schedules for utilities' use in DSIC implementation.

Authors

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Bill Garfield, President, Arizona Water Company, 30 years in utility operations

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Paul Walker, Chairman of Responsible Water, President at Insight Consulting, MBA, 12 years in utility regulation, analysis, and consulting

Note: Throughout the paper we use the DSIC and "Distribution System Improvement Charge" to include the CSIC or "Collection System Improvement Charge" which is the wastewater utility version of the DSIC.

Distribution System Improvement Charges

("DSIC")

For over 13 years, the Arizona Corporation Commission has considered and denied implementing Distribution System Improvement Charges (and the equivalent for sewer utilities, the Collection System Improvement Charge) for the water and wastewater utilities it regulates DSICs and CSICs are used in a dozen other states, from California to Pennsylvania, and time and again have been proven to reduce the frequency of rate cases, lower the size of rate hikes, and incent a smoother and more consistent infrastructure replacement program that deals with aging and failing infrastructure.

Organizations like Food & Water Watch have attacked DSICs. RUCO and others have mischaracterized DSICs. Organizations like NARUC and the Council of State Governments have endorsed DSICs.[1] The Commission has supported the end goals of DSICs for the state's largest utilities while denying them to the water industry.

The end goals of DSICs echo the Commission's support for APS Settlements, i.e., "that APS's customers will have the benefit of rate stability...while also providing the Company with adequate revenue to enable it to provide safe and reliable electric service."[2] The end goals of a DSIC are:

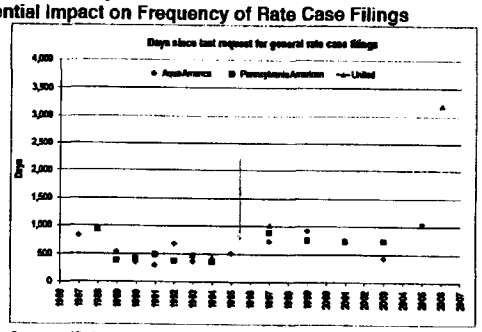
- Reduced rate case frequency and cost,
- Smaller rate hikes and increased rate stability,
- Improved infrastructure, and an
- Improved regulatory climate for investment.

This paper explores the benefits of DSICs and contrasts the Commission's supportive positions with regard to energy utilities against its opposition to DSICs for water utilities and closes by recommending a procedural process for DSICs and a set of 11 schedules that the Commission could easily adopt as a template and begin moving Arizona towards a more reliable and sustainable water future.

It is inarguably true that DSICs reduce the frequency of rate cases, and the size of rate hikes.

The gold vertical arrow in the middle of the graph denotes the start of Pennsylvania's DSIC era – as one can see, rate cases are less frequent. This means less rate case expense for the company, the customers, and the Commission; increased efficiency as the Commission deals with continuing staffing and budget pressures; and ultimately the customers benefit as rates become stable with gradual and manageable increases.

Focus on Pennsylvania:
Potential Impact on Frequency of Rate Case Filings



(Source: Presentation of Dr. Jon Beecher, Executive Director, Institute for Public Utilities, Michigan State University, to the 2008 Eastern NARUC Water Committee Rate School)

[1] NARUC Resolution, February 24, 1999; NARUC Best Practice Resolution, July 27, 2005; Council of State Governments, Publications of Suggested State Legislation, 1999.

[2] See, e.g., Staff's Opening Brief, APS Rate Case, 11-0224, Page 12, Lines 14-16

Regulatory lag leads to larger rate hikes and creates "rate shock."

Some argue that regulatory lag is a "benefit" to customers because it provides them the use of infrastructure without them having to pay for that infrastructure. But that is only the 'seen' aspect of the economics of utility investment, the 'unseen' aspect is that there is no such thing as a free lunch: With lag, those assets will go into rate base in one fell swoop – and the customers are always shocked and upset when that bill comes due because it includes several years' of plant investment. How many thousands of water customers have to ask the Commission the same question ("why does my bill have to go up by so much at one time?") before it realizes that the supposed regulatory lag benefit is, in fact, worse for customers.

Under a DSIC approach, plant would not "stack up" for the next rate case – it would incrementally flow into rates, the model used by Arizona's cities and municipal water providers. This incremental approach, which some call rate gradualism, is also the basis for APS, TEP, and Unisource recovering their investment in renewable energy, transmission, and pollution control flow through their adjustor mechanisms – each of which is based on utility plant.

Customers overwhelmingly support small, annual rate adjustments instead of large, infrequent ones.

Responsible Water commissioned a poll of 4,000 Arizonans in September of 2012 – in that poll we asked "when utility rates have to go up, would you prefer: 1) small annual changes, or b) large changes every few years?" **89.4% of Arizonans said they preferred rate gradualism – small annual changes.** This approach has the least impact on their household budget and allows them to adjust to cost increases as they occur instead of bundling several years' of those increases into one large hike.

The impact to customer rates from DSICs is small and manageable for customers, and reduces rate hike request size and frequency. Actual DSIC adjustor surcharges from around the nation:

AMERICAN WATER

DSIC Charges – Examples of Approximate Impact on Typical Customer Bill

State	DSIC MAX (% of revenues)	Typical Avg. Monthly Residential Bill	MAX DSIC Surcharge Per Month	% Current Surcharge	Current Surcharge Per Month
IL	5%	$40.33 (Peoria)	$2.02	0.00%*	$0.00
IN	5%	$30.53	$1.53	2.49%	$0.76
OH	3%/filing 3 filings between rate cases	$35.07 (Franklin Co)	$1.05 (each yr for 3 yrs)	0.00%*	$0.00
MO (St Louis Co)	10%	$21.50	$2.15	2.10%	$0.45
NY	Capped at $3 million over routine spend	$48.90	X	X	$0.35
PA	7.50%	$42.64	$3.20	2.44%	$1.04

* Surcharges worked into general rates pursuant to general rate cases

www.amwater.com

In particular, let's focus on Pennsylvania; the state most aggressively trying to consolidate and reform its water industry. It has gone from regulating and overseeing 500 water companies to 125 in under a decade and is on its way to 50 companies.[3] In that most pro-investor state, the DSIC surcharge is averaging $1.04 a month.

[3] Arizona Regulatory Reports, Issue 11-4, August 5, 2011, "*Time for Action – Regulatory Leadership Can Create A Better Future*"

DSICs, like other adjustors for known and measurable costs, are not single issue ratemaking.

The other criticism is that while DSICs provide for gradualism, they risk "single issue ratemaking." This is interesting when contrasted with the Commission's support of APS settlements that include a host of adjustor mechanisms, each largely based on ensuring "that APS's customers will have the benefit of rate stability...while also providing the Company with adequate revenue to enable it to provide safe and reliable electric service."[4]

It is worth highlighting that APS' non-fuel and non-power related adjustor-based revenues are nearly two and a half times larger than the DSIC proposal offered by Responsible Water. Arizona Public Service (far and away the largest utility in Arizona) provided Responsible Water with the following information regarding their estimates of bill adjustor amounts (excluding fuel and power costs which we will describe later in the paper.)

APS Adjustors (Excluding Fuel and Power)	% of APS 2011 Revenues [$2.992 BN]	Estimated Annual Impact
Demand Side Management[5]	2.2%	$66 MM
Retail Transmission Cost[6] Adjustor[7]	2.5%	$76 MM
Renewable Energy[8]	2.4%	$71 MM
Lost Fixed Cost Revenue[9]	0.2%	$7 MM
Non-fuel/Non-Power Adjustors	**7.3%**	**$220 MM**

In addition to those adjustors, APS was provided with post-test year plant adjustments to rate base in both its 2009 and 2012 Rate Case Settlements. In dollars, and as a percent of rate base, APS saw significant Commission steps to reduce regulatory lag on its investments into plant:

APS Plant Adjustments	% of APS Rate Base [$8.167 BN]	Rate Base Added
Four Corners[10]	3.4%	$279 MM
2012 Post-TY Plant[11]	1.4%	$116.3 MM
Solar Transfer from Renewable Surcharge to Base Rates[12]	2.8%	$226.7 MM
Total Post-TY Rate Base Adjustments, 2012	**7.6%**	**$622 MM**

[4] Staff's Opening Brief, APS Rate Case, 11-0224, Page 12, Lines 14-16
[5] Data provided to Responsible Water from APS
[6] Data provided to Responsible Water from APS
[7] Data provided to Responsible Water from APS
[8] Data provided to Responsible Water from APS
[9] These numbers were provided to Responsible Water from APS – however, the 2012 APS Settlement allows APS to flow up to 1% of its revenues thru the LFCR, which would raise its annual impact from APS' $7 MM figure, to $29 MM.
[10] Data provided to Responsible Water from APS.
[11] Data provided to Responsible Water from APS.
[12] APS 2012 Settlement, Docket No. 11-0224, "Renewable Energy Projects Transferred from the Renewable Energy Surcharge ('RES') to Base Rates," Attachment D to Settlement, Page 1 of 1.

This of course leaves out the question of the APS power and fuel supply adjustor. The so-called PSA has been supported by many parties, including Commission Staff, RUCO, and APS as being essential given the size and importance of fuel and power supply costs.

The PSA is provided to APS (and other electric utilities in Arizona) despite the fact that those utilities have abilities that no water company has with regard to power costs: Electric utilities can purchase power in a competitive market, we cannot. And electric utilities can sign long-term contracts with different providers, we cannot. Which entirely raises the question of: Why does the Commission deny power supply adjustor requests from water companies while simultaneously: a) approving double-digit price hikes in water pumping tariffs, *and* b) preventing water companies from having electric choice and competition?[13]

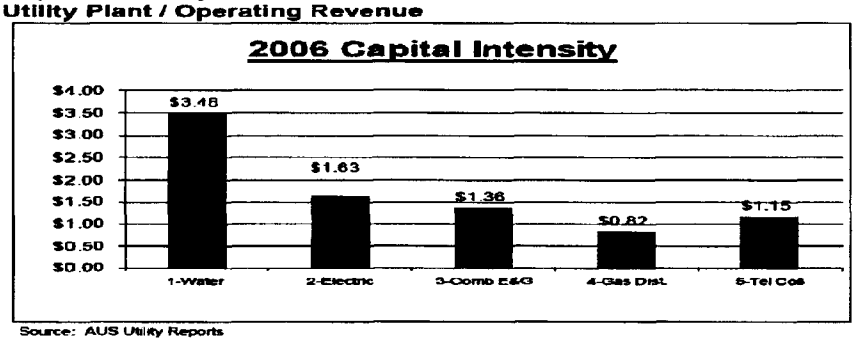
In trying to estimate the "value" of the PSA, there seems to be only one number that is meaningful – APS can pass thru changes in its power and fuel costs of up to $0.004/kWh.[14] APS' retail sales were 28,210,326,000 kWh in 2011.[15]

Therefore, APS' 2012 Settlement provides it with the opportunity to pass thru PSA adjustments of $112MM per year – based on $2.992BN of revenues **APS' PSA alone could add an additional 3.7% per year to customer bills.**[16]

Despite the fact that the DSICs proposed by Responsible Water would be limited to 3% of revenues for normally operating systems, and 7% for systems facing critical infrastructure demands, those who oppose DSICs argue that adjustors that improve investor attitudes are not in the public interest when they apply to water companies. From the bases of consistency and relative impact, opposition to the DSIC cannot be squared with support for the adjustors and post-test year plant adjustments granted to energy companies like APS.

When compared with APS' Commission-approved adjustors and post-test year plant adjustments, the DSIC is miniscule – but relativity and consistency aren't the only reasons to implement a DSIC policy. Water and wastewater utilities face a much higher degree of capital intensity than electric utilities:

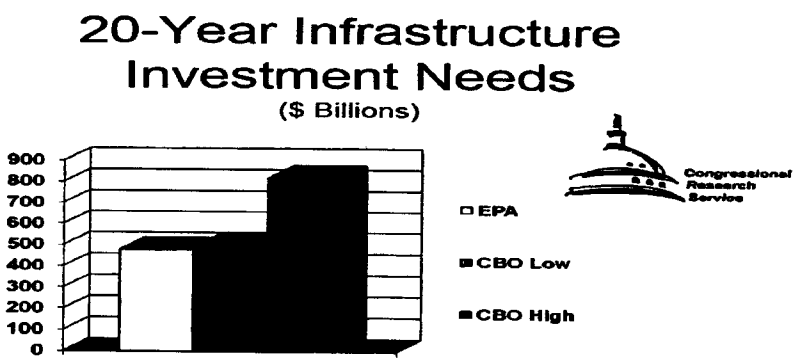
Capital Intensity:
Utility Plant / Operating Revenue



Source: AUS Utility Reports

[13] This is a question that will be explored in future studies by Responsible Water.
[14] APS 2012 Settlement, Docket No. 11-0224, "Power Supply Adjustor Plant of Administration," Attachment C to Settlement, Page 1 of 20, Section 1.
[15] APS' 2011 Renewable Energy Standard Compliance Report dated March 20, 2012, Page 3, Footnote 10 which says "Based on 2011 retail sales of 28,210,326 MWH." Our calculation is as follows: 1,000 kWh = 1 MWH. Thus 28,210,326 MWH = 28,210,326,000 kWh. 28,210,326,000 * $0.004 = $112,842,304.
[16] $112,000,000 / $2,992,000,000 = 3.74%

That increased capital intensity faces a major challenge: the increasing need for capital to repair and replace infrastructure that has been in the ground for decades. **While we often think of Arizona as a young state, it's worth noting that a water main put in the ground when Ronald Reagan took office is now fully depreciated and is entering old age and facing line break and water loss issues.** In fact, across the U.S. the need for water and wastewater investment has been studied by the EPA and the Congressional Budget Office, with each finding at least $25 billion a year in capital needs:



Surcharge mechanisms, like the DSIC, don't guarantee earnings, they encourage investment.

A primary attack on the DSIC is based on the theory that it "ensures" companies earn their ROE. Claiming that a DSIC would "ensure" ROEs in Arizona is simply incorrect; DSICs reduce the amount of ROE under-recovery by reducing regulatory lag. To do that, a DSIC provides a return on invested capital in the form of used and useful plant – thus while revenues increase under a DSIC, so has investment in used and useful plant and the only return allowed is the rate of return on used and useful plant. It is not mathematically possible to guarantee ROE earnings by allowing rate of return recovery on invested capital.

This opposition to the DSIC stands in contrast to Commission support for APS settlements since 2009 in which the improvement in investor attitudes resulting from adjustors was cited as a public benefit. For example, Commission Staff argued in the APS 2012 rate case that a reason for its support was that "[t]he proposed Settlement Agreement builds on the progress made in APS's last rate case by including provisions designed to improve the Company's financial condition so that it can compete in attracting capital for investments to meet the needs of its customers."[17]

RUCO supported the series of APS Settlements and the adoption of numerous adjustors by arguing that "a stable rate base with the ability for the Company to remain financially healthy through changes in its adjustors is in the public interest."[18] Commission Staff then cited and highlighted that RUCO position as a reason why the Commission should support the APS 2012 Settlement.[19,20]

[17] Staff's Opening Brief, APS Rate Case, 11-0224, Page 10, Lines 19-23
[18] Transcript, APS, 11-0224, at Pg. 130
[19] Staff's Opening Brief, APS Rate Case, 11-0224, Page 12, Lines 9-10
[20] See also, Dec. No. 73183, May 2012, at Page 18, Lines 21.5 thru 25.5

RUCO and Staff's concern should extend to the water industry: For the period, 2006-2010, the average earned ROE of the Class A Responsible Water companies was only 1.96%.[21]

Finally, this argument misstates the very nature of risk: by reducing regulatory lag for used and useful plant investments, the Commission does not reduce risk compensated for in ROE. According to the text books Commission Staff relies upon, risk is related to *variability* of operating income, not the *level* of operating income.[22]

A DSIC increases revenues by an amount that is directly based on additional fixed costs that are actually incurred. A DSIC does not reduce the variability of operating income, which varies mainly as a result of fluctuating sales (e.g. weather) and variable costs (e.g. power, chemicals). Reducing the amount of regulatory lag (and as a result the level of under-recovery) does not equate to a reduction in the variability of operating earnings. And it certainly doesn't reduce the variability of that portion of operating earnings that Staff would claim is "systematic," or "non-diversifiable," and therefore affects the cost of capital.

We are not suggesting that the Commission turn a blind eye to earnings; in fact our proposed DSIC schedules provide explicit data on earnings.

The argument that ROEs must be cut in "exchange" for DSICs is one-sided and asymmetrical.

An ROE is the incentive for an investor to take on risk – the possibility of making a return on her investment impels an investor to put capital at risk. So, it is important to clearly understand what "risk" means from an investment perspective: According to Harry Markowitz, the father of the Efficient Market Hypothesis which led to, among other things, the Capital Asset Pricing Model (CAPM), "Efficient portfolios minimize that 'undesirable thing' called variance while simultaneously maximizing that 'desirable thing' called getting rich... That is what Markowitz meant when he introduced the concept of variance to measure risk, or the uncertainty of return."[23]

But in the past several years, the average return for the class A water companies which comprise Responsible Water has been 1.96% - while allowed ROEs in Arizona over that period averaged 9.60%.[24]

In Arizona, the variance between what water utilities actually earn and what utilities are authorized to earn is staggering. It is that variance, Markowitz's "risk" that has led several investment analysts to rank the state among the worst in the nation for utility investment.[25]

Furthermore, regulatory lag, in an environment of rising infrastructure-related costs, will cause a utility to under-recover its cost of service. The Commission has never added a premium to a utility's authorized ROE to account for regulatory lag (i.e. the fact that the utility likely will not earn its cost of capital under the traditional ratemaking framework in Arizona the "historic test year"). **Mechanisms that are designed to reduce regulatory lag, such as the DSIC, do not warrant a downward adjustment to the authorized ROE, as such a reduction would defeat the purpose of the DSIC (reducing regulatory lag) and render it useless.**

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[21] Data provided by Desert Mountain Analytical Services

[22] See, for example, Emery, Douglas R., Finnerty, John D. *Principles of Corporate Finance with Corporate Applications*, (1991), Pages 157 - 158.

[23] Peter L. Bernstein, *Against the Gods: The Remarkable Story of Risk*, (1998), Page 256

[24] Data provided by Desert Mountain Analytical Services; and Insight Consulting

[25] See, e.g., Janney Montgomery Scott, "Introducing the Janney RCI" (2011); and also, S&P, "Assessment of US Regulatory Climates" (2008, 2010)

Behind all these arguments, there seems to be a general attitude among some parties that if water utilities recover their costs of service (including a return on invested capital), the Commission has somehow failed. This is in contrast with the Commission's decisions to allow APS to recover revenues through adjustors, and over half a billion dollars of post-test year plant adjustments in the explicit interest of minimizing APS' earnings variability and making APS better able to serve customers.

Reducing the ROE in exchange for DSIC approval eliminates the benefit of DSICs and increases "Rate Shock" challenges.

Some suggest that if water companies receive DSICs they should be required to accept lower ROEs – this is premised on a) the misunderstanding of what risk is (i.e., variability in returns), and b) the theory that utility ratemaking is a zero-sum game in which anything improving a utility's financial condition has to be tied to something that harms its financial condition. In the end, the zero-sum approach means that the Commission will never improve financial conditions, because the lost revenue resulting from a reduced ROE in a general rate case could be greater than any potential revenues resulting from a subsequent DSIC filing (depending on the utility's rate base and operating revenues).

A utility in need of a DSIC is likely riskier.

To the extent a utility is faced with an infrastructure crisis (i.e. the need to replace large amounts of infrastructure), and is therefore in need of a DSIC, it is *more* risky, and warrants a higher ROE to enable it to attract capital on reasonable terms for the purpose of replacing such infrastructure. Complicating matters is the fact that the interest coverage requirements required by lenders and contained in bond indentures, which can be as high as 2.5 times total interest expense, are remnants of the days before volumetric and tiered rates were in effect. These coverage requirements and other covenants have not been adjusted to accommodate the newer conservation rate structures with declining revenues over time or the increasing burden of infrastructure replacement programs. (See "The Pendulum Swing of Revenue Stability and Conservation" Journal AWWA, Aug. 2010, p. 26) As a result, potential lenders are less likely to loan significant amounts of money to water utilities with low authorized ROEs, historical test years, and conservation-based rates.

Proposed DSIC Process - Overview.

One of the key challenges in implementing a new policy is the question of how to do so – Responsible Water proposes the following process as a proper beginning for the implementation of DSICs. Without question, over time the Commission, the customers, and the regulated utilities will identify opportunities and ways to improve the process. With biennial workshops on water policy, the Commission should include a review of this and other processes.

Proposed DSIC and CSIC Process

1. Utilities shall apply for and obtain generic approval of a DSIC or CSIC in the context of a rate case.

2. Once approved generically, DSICs and CSICs shall not have annual adjustments greater than either 3% or 7% of annual revenues. Utilities requesting 7% annual caps must show that the infrastructure replacement needs in the affected utility require an investment of greater than 50% of existing rate base in less than a five-year period; or greater than 100% over a ten-year period.

3. Each utility granted a DSIC shall comply with the following process and requirements:
    a. To initiate a DSIC or CSIC adjustment, the utility shall file Schedules (See Attached) which show the following:
        i. DSIC-eligible plant installed through the period for which recovery is sought, by NARUC account type;
        ii. Proposed surcharge for all DSIC-eligible plant;
        iii. Prior year DSIC collections and Over/ Under collected amounts;
        iv. Balance sheet before and after DSIC plant inclusion;
        v. Income statement before and after DSIC surcharge inclusion;
        vi. Revenue requirement calculations;
        vii. Surcharge Calculation;
        viii. Construction Ledger;
        ix. Earnings test;
        x. Typical bill analysis.
    b. As part of its DSIC adjustor filing, the utility shall make readily available documentation which shows the following:
        i. Approval Of Construction and Invoices for DSIC-eligible plant installed;
        ii. DSIC-eligible plant and projects the utility plans to install in the then-current year , by NARUC account type;
        iii. Actual and estimated in-service dates for said plant.
    c. Concurrent with its DSIC adjustor filing, the utility shall notify customers of its proposed DSIC adjustment and its potential impact on rates; the notice shall include information on how to contact the Commission's consumer services section and how to contact the utility for more information.

4. The adjustor is automatically effective within 30 days of receipt of the DSIC adjustor filing, unless Staff notifies the utility whether it believes it needs more time to review or issue a report or if a hearing is required to adjudicate the DSIC proposal.
    a. If a hearing is required, it shall be completed within 45 days, and a ROO shall be issued within 45 days of the conclusion of the hearing(s). The Commission shall issue an order at the next open meeting.

ABLE WATER COMPANY
Docket No. W-XXXXX-XX-XXXX
Balance Sheet
As of December 31, XXXX

Line No.		PWI SYSTEM
1	ASSETS BUILT IN PAST YEAR BY NARUC ACCOUNT	
2	309 SUPPLY MAINS	
3	Project Name & Location	
4	Gross Utility Plant	
5	Less: Accumulated Depreciation	
6	Net Utility Plant	$ -
7	332 DISTRIBUTION AND TRANSMISSION MAINS	
8	Project Name & Location	
9	Gross Utility Plant	
10	Less: Accumulated Depreciation	
11	Net Utility Plant	$ -
12	333 SERVICES	
13	Project Name & Location	
14	Gross Utility Plant	
15	Less: Accumulated Depreciation	
16	Net Utility Plant	$ -
17	334 METERS	
18	Project Name & Location	
19	Gross Utility Plant	
20	Less: Accumulated Depreciation	
21	Net Utility Plant	$ -
	TOTAL DSIC PLANT	$ -
	LESS: ACCUMULATED DEPRECIATION	$ -
22	NET DSIC PLANT	$ -
23	AUTHORIZED WACC, DECISION NO.	
24	DSIC SURCHARGE	$ -
	AUTHORIZED ROE, DECISION NO.	
	EARNED ROE WITH SURCHARGE	

ABLE WATER COMPANY 1-Balance Sht
Docket No. W-XXXXX-XX-XXXX
Balance Sheet
As of December 31, 20XX

Line No.		[A] TOTAL COMPANY	[B] REGION	[C] DISTRICT
1	ASSETS			
2				
3	UTILITY PLANT			
4	Gross Utility Plant	$ -		
5	Less: Accumulated Depreciation	-		
6	Net Utility Plant	$ -		
7				
8	CURRENT ASSETS			
9	Cash on Hand and In Banks	-		
10	Investments and Special Deposits	-		
11	Accounts Receivable	-		
12	Materials & Supplies	-		
13	Other	-		
14	Total Current Assets	$ -		
15				
16	DEFERRED DEBITS	$ -		
17				
18	TOTAL ASSETS	$ -		
19				
20				
21	LIABILITIES			
22				
23	CAPITALIZATION			
24	Common Stock	-		
25	Capital Surplus	-		
26	Retained Earnings	-		
27	Common Stockholders Equity	$ -	$ -	$ -
28	Long-Term Debt	-	-	-
29	Total Capitalization	$ -	$ -	$ -
30				
31	CURRENT LIABILITIES			
32	Notes Payable	-		
33	Accounts Payable	-		
34	Accrued Expenses	-		
35	Other	-		
36	Total Current Liabilities	$ -		
37				
38	DEFERRED CREDITS			
39	Advances for Construction	-		
40	Contributions in Aid of Construction	-		
41	Deferred Income Taxes	-		
42	Other	-		
43	Total Deferred Credits	$ -		
44				
45	TOTAL CAPITAL AND LIABILITIES	$ -		
46				
47				
48				
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1-Balance Sht

ABLE WATER COMPANY
Docket No. W-XXXXX-XX-XXXX
Income Statement
As of December 31, 20XX

2-Income Stmt

Line No.		[A] TOTAL COMPANY	[B] SYSTEM
1			
2	OPERATING REVENUE	$ -	$ -
3			
4	OPERATING EXPENSES		
5	Operation and Maintenance	-	-
6	Depreciation	-	-
7	Taxes Other than Income	-	-
8	Income Taxes	-	-
9	Total Operating Expenses	$ -	$ -
10			
11	OPERATING INCOME	$ -	$ -
12			
13	OTHER (INCOME) AND DEDUCTIONS		
14	Other (Income) - Net	-	-
15			
16	Interest on Long-Term Debt	-	-
17	Other Interest and Amortization	-	-
18	Total Interest	$ -	$ -
19			
20	Total Other (Income) and Deductions	$ -	$ -
21			
22	NET INCOME	$ -	$ -
23			
24			
25			
26			
27			
28			
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30			
31			
32			
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ABLE WATER COMPANY 3-Earnings Test
Docket No. W-XXXXX-XX-XXXX
Earnings Test
As of December 31, 20XX

Line No.		[A] DISTRICT
1		
2	REVENUE	
3	Total Operating Revenue	$ -
4		
5	OPERATING EXPENSES	
6	Operation and Maintenance	-
7	Depreciation	-
8	Taxes Other than Income	-
9	Income Taxes	-
10	Total Operating Expenses	$ -
11		
12	OPERATING INCOME/(LOSS)	$ -
13		
14	RATE BASE - O.C.L.D. (Includes DSIC Plant)	$
15	(Sch. 7, Ln. 33)	
16		
17	RATE OF RETURN - O.C.L.D	%
18	(Ln. 12 / Ln. 14)	
19		
20	AUTHORIZED RATE OF RETURN	%
21	(Decision No. _____)	
22		
23	OPERATING MARGIN	%
24	(Ln. 12 / Ln. 3)	
25		
26	Interest Expense - Net	$ -
27		
28	INEREST COVERAGE	
29	[(Ln. 12 + Ln. 9) / Ln. 26]	
30		
31	Other (Income) and Deductions	$ -
32		
33	Equity Ratio	
34	(Decision No. _____)	
35		
36	Allocated Equity	
37	(Ln. 14 x Ln. 33)	
38		
39	RETURN ON EQUITY	%
40	[(Ln. 12 - Ln. 26 - Ln. 31) / Ln. 36]	
41		
42	AUTHORIZED RETURN ON EQUITY	
43	(Decision No. _____)	
44		
45		
46		
47		
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ABLE WATER COMPANY
Docket No. W-XXXXX-XX-XXXX
Rate Review
As of December 31, 20XX

4-Rate Review

[A]

DISTRICT A

Line No.		Per Dec. No. XXXXX	12 Mos. Ending 12/31/2011	DSIC Increase	Adjusted with DSIC
1					
2	REVENUE				
3	Total Operating Revenue	$ -	$ -	$ -	$ -
4					
5	OPERATING EXPENSES				
6	Operation and Maintenance	-	-	-	-
7	Depreciation	-	-	-	-
8	Taxes Other than Income	-	-	-	-
9	Income Taxes	-	-	-	-
10	Total Operating Expenses	$ -	$ -	$ -	$ -
11					
12	OPERATING INCOME/(LOSS)	$ -	$ -	$ -	$ -
13					
14	RATE BASE - O.C.L.D.	-	-		-
15	(Sch. 7, Ln. 33)				
16					
17	RATE OF RETURN - O.C.L.D				
18	(Ln. 12 / Ln. 14)				
19					
20	AUTHORIZED RATE OF RETURN				
21	(Decision No. 71845)				
22					
23	OPERATING MARGIN				
24	(Ln. 12 / Ln. 3)				
25					
26	Interest Expense - Net	$ -	$ -	$ -	$ -
27					
28	INEREST COVERAGE				
29	[(Ln. 12 + Ln. 9) / Ln. 26]				
30					
31					
32					
33	Equity Ratio				
34	(Decision 71845)				
35					
36	Allocated Equity	$ -	$ -	$ -	$ -
37	(Ln. 14 x Ln. 33)				
38					
39	RETURN ON EQUITY				
40	[(Ln. 12 - Ln. 26) / Ln. 36]				
41					
42	AUTHORIZED RETURN ON EQUITY				
43	(Decision No. 71845)				
44					
45	THREE FACTOR RATIO	-			
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					

4-Rate Review

ABLE WATER COMPANY
Docket No. W-XXXXX-XX-XXXX
Revenue Requirement
As of December 31, 20XX

5-Revenue Req

Line No.		[A] DISTRICT	[B]	[C]	[D]
1	TEST YEAR DATA				
2					
3	Eligible DSIC Plant in Service				
4	Accumulated Depreciation				
5	(Sch. B, p. 1)				
6	Eligible DSIC Plant Rate Base	$ -			
7	Required Rate of Return				
8					
9	Required Operating Income	$ -			
10	(Ln. 6 x Ln. 7)				
11	Revenue Conversion Factor				
12					
13	Revenue Requirement - Return on Eligible DSIC Plant	$ -			
14	(Ln. 9 x Ln. 11)				
15					
16	Depreciation on Eligible DSIC Plant				
17	(Sch. B, p. 1)				
18					
19	Total Revenue Requirement	$ -			
20	(Ln. 13 + Ln. 16)				
21					
22	Total Operating Revenue	$ -			
23					
24	Maximum Increase cap				
25					
26	Maximum Increase	$ -			
27	(Ln 22 X Ln 24)				
28					
29	Total Revenue Requirement lesser of Ln19 or Ln 26	$ -			
30					
31					
32					
33					
34			DISTRICT		
35			Current Rates	Proposed Rates	
36					
37					
38			Decision No.		
39				DSIC	Total [B + C]
40	5/8 X 3/4-INCH RESIDENTIAL METER				
41	Basic Service Charge		$	$	$
42	Commodity Rate (Per M Gallon)		$	$	$
43	0 - X,000 Gallons		$	$	$
44	X,001 - X,000 Gallons		$	$	$
45	Over X,000 Gallons		$		$
46					
47					
48					
49					
50	Average Residential Bill (5/8 x 3/4 meter) - (____ gallons of usage)				
51					
52					
53					
54					
55					

5-Revenue Req

ABLE WATER COMPANY
Docket No. W-XXXXX-12-XXXX
Surcharge Calculation
As of December 31, 2011

6-Schg Calc

Line No.		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]
						DISTRICT				
3	GROWTH		Customers	M Gallons Sold	M Gallons Sold Per Cust.					
4	12/31/2010 (Year 1)									
5	12/31/2011 (Year 2)									
6	Increase/(Decrease)		-	-	-					
7	Percentage Change									
8	Average M Gallons									

INCREMENTAL FIXED COSTS TO BE RECOVERED PER BILL

Size	Customers by Meter Size 12/31/20XX	12/31/20XY	Est. Average Customers (A+B)/2	Basic Service Charge	Meter Multiples	Equivalent Meters (C X F)	Fixed Increment Monthly (G39 X F)	Fixed Increment Annual (C X G) X 12
5/8"						-		
1"						-		
1.5"						-		
2"						-		
3"						-		
4"						-		
6"						-		
8"						-		
10"						-		
Totals						-		$ -

CALCULATION OF SURCHARGE

		Minimum Surcharge (F34)
Total Revenue Requirement of DSIC Eligible Plant Capital Costs	$ -	
100% of Total Revenue Requirement on Line 34 Recoverable through Basic Service Charge		$ -
Equivalent Meters (Col. G, Ln. 25 X 12 Mos.)		-
Increment Per Equivalent 5/8" Meter (Col. G, Ln. 35 / Col. G, Ln. 38)		
Average M Gallons (Col. C, Ln. 8)		
Increment Per M Gallon (Col. H, Ln. 36 / Col. H, Ln. 41)		

6-Schg Calc

ABLE WATER COMPANY
Docket No. W-XXXXX-XX-XXXX
Rate Base
As of December 31, 20XX

7-Rate Base

Line No.		[A]	[B]	[C]	[D]
			DISTRICT		
		Per Dec. No.	DSIC Plant Increase	Year End Balance (A + B)	Current Balance 12/31/20XX
1					
2	DSIC Eligible Plant	$ -			$ -
3					
4	Other Utility Plant in Service		-		
5	Total Plant in Service	$ -	$ -		$ -
6	(Ln. 2 + Ln. 4)				
7					
8	Accumulated Depreciation				-
9	Net Utility Plant	$ -	$ -	$ -	$ -
10	(Ln. 5 - Ln. 8)				
11					
12	Advances	-	-		-
13					
14	Contributions - Net	-	-		-
15					
16	Deferred Income Tax	-	-		-
17					
18	Customer Deposits	-			-
19					
20	Working Capital Allowance	-	-		-
21	(Per Decision No. _____)				
22					
23	Net Regulatory Asset/(Liability)	-			
24					
25	Total Rate Base	$ -	$ -	$ -	$ -
26	(Ln. 9 - Ln. 12 - Ln. 14 - Ln. 16 + Ln. 18)				
27					
48					
49					
50					
51					
52					
53					
54					
55					

ABLE WATER COMPANY
Docket No. W-XXXXX-XX-XXXX
CWIP Ledger
As of December 31, 20XX

8-CWIP Lgr

Line No.	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
1					DISTRICT					
2	W.A. No.	Month/Year	Date	Description	Vendor Name	Invoice No's.	1	2	3	Total
3										
4	X-									-
5										-
6										-
7							$ -	$ -	$ -	$ -
8										
13										
14										
15										
16										
17										
18							$ -	$ -	$ -	$ -
19										
20						Project Totals	$ -	$ -	$ -	$ -
21										
22						Depreciation Rate				
23										
24						Annual Depreciation Expense	$ -	$ -	$ -	$ -
25										
26										
27										
28										
29										
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ABLE WATER COMPANY
Docket No. W-XXXXX-XX-XXXX
Three Factor Calculation
As of December 31, 20XX

9-Three Fac

Line No.	System	20XX Customers	20XX Gross Plant Less Intangibles	20XX Gross Payroll	Ratios Customers	Ratios Gross Plant Less Intangibles	Ratios Gross Payroll	Total
1								
2								-
3								-
4								-
5								-
6								-
7								-
8								-
9								-
10								-
11								-
12								-
13								-
14								-
15								-
16								-
17								-
18								-
19								-
20								
21	Totals	-	$ -	$ -		$ -	$ -	-
22								
23								
24								
25								
26								
27								
28								
29								
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9-Three Fac

ABLE WATER COMPANY
Docket No. W-XXXXX-XX-XXXX
Typical Bill Analysis
As of December 31, 200X

10-Typical Bill

Line No.	Gallons Consumption	[A] Present Rates	[B] Proposed DSIC Surcharge	[C] New Rates	[D] Percent Increase
			DISTRICT		
2	-	$	$	$	
3	1,000				
4	2,000				
5	3,000				
6	4,000				
7	5,000				
8	6,000				
9	7,000				
10	8,000				
11	9,000				
12	10,000				
13	11,000			-	
14	12,000			-	
15	13,000			-	
16	14,000			-	
17	15,000			-	
18	20,000			-	
19	25,000			-	
20					
21					
22	Average Residential Consumption				
23					
24	Residential Bill at Average Consumption	$	$	$	
25					
26					
27					
28					
29					
30	Basic Service Charge	$	$		
31					
32	Commodity Rate (per M Gallon)				
33	0 - 3,000 Gallons	$	$		
34	3,001 - 10,000 Gallons	$	$		
35	Over 10,000 Gallons	$	$		
36					
37					
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Paul Walker Surrebuttal Testimony

January 11, 2016

ATTACHMENT D

EXHIBIT "A"

SETTLEMENT AGREEMENT

This Settlement Agreement ("Agreement") is entered into as of May 15th, 2008 between Arizona Water Company and Global Water Resources, LLC and its subsidiaries and affiliates, including but not limited to Global Water Inc., Global Water - Santa Cruz Water Company, Global Water - Palo Verde Utilities Company, Francisco Grande Utility Company, CP Water Company, Global Water - Picacho Cove Water Company and Global Water - Picacho Cove Utilities Company (collectively, "Global" or the "Global Entities"). Arizona Water Company and the Global Entities are referred to as the "Parties."

RECITALS

A. Arizona Water Company and certain of the Global Entities are parties to certain cases pending before the Arizona Corporation Commission ("Commission") that are listed in Exhibit A to this Agreement and incorporated by this reference. Collectively, these cases are referred to as the "Related Proceedings."

B. In the Related Proceedings, one or more of the Parties filed an application for extension of its Certificate of Convenience and Necessity ("CCN"), intervened in and protested one or more of the CCN applications, filed a complaint with the Commission involving one or more of the Parties, sought Commission approval for the transfer of their CCN, or intervened in and protested an application for the transfer of CCNs.

C. The Parties desire to end their disputes and to provide for the resolution of the Related Proceedings on certain terms and conditions that are in the public interest. The Parties' agreement concerning a comprehensive settlement of their disputes in the Related Proceedings has compelling public benefits. It is therefore in the public interest for the Commission to

approve this Agreement, including the planning areas and CCN Applications amended as set forth below, for the following reasons, among others:

(1) Arizona Water Company, Global Water - Santa Cruz Water Company, Francisco Grande Utility Company, CP Water Company, and Global Water - Picacho Cove Water Company (collectively, the "Concurring Water Utilities") have identified and established logical and supportable geographic boundaries between their respective CCNs and planning areas, such as major thoroughfares like Kortsen Road and John Wayne Parkway;

(2) The expanded use of reclaimed water in areas where the CCNs and planning areas of Arizona Water Company and Global Water - Palo Verde Utilities Company overlap (the "Overlap Areas") will reduce reliance on other water sources and on the Central Arizona Groundwater Conservation District;

(3) Two large, regionally significant water providers will set aside their differences and work cooperatively in a manner that will assist in water conservation efforts and prudent, sustainable uses of groundwater and other water resources; and

(4) The Parties, Commission and Commission Staff will be spared the expense and resources necessary to adjudicate the numerous disputed cases between the Parties.

D. A central premise and material consideration of the Parties' settlement of the Related Proceedings is their agreement about the urgent need for the Concurring Water Utilities to undertake and continue their long-term master planning process. The Parties' planning areas lie within an Active Management Area that has limited access to surface water with projected continued record growth. The resulting demands on water resources require the Concurring

Water Utilities to engage in long-term water resource and service planning to assure that current and future customers continue to receive reliable water service. That process requires the Concurring Water Utilities to plan, design, construct, finance, and operate water supply, treatment, storage, and transmission and distribution infrastructure to meet the public water supply requirements within defined geographic areas which include their existing CCNs and in their respective CCN extensions and planning areas as provided for in this Agreement.

NOW, THEREFORE, in consideration of the mutual promises, obligations, representations and covenants contained in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

AGREEMENT

1. Compromise of Dispute. The Parties acknowledge, represent and warrant the truth, accuracy and correctness of the foregoing recitals. The Parties each agree that this Agreement is a compromise of disputed claims, and that fully implementing this Agreement will advance important public policies favoring orderly and efficient regional planning, development, and management of water supplies.

2. Planning Area Boundary Settlement. As part of a comprehensive settlement of their disputes in the Related Proceedings, the Parties have reached agreement on the logical and supportable geographic boundaries between the Concurring Water Utilities' respective planning areas. Arizona Water Company shall amend its Pinal Valley Water System Planning Area and Global shall amend its planning areas (collectively the "Planning Areas") as set forth on the Settlement Map dated April 18, 2008 which is attached as Exhibit B to this Agreement and incorporated by this reference (the "Settlement Map").

3. Amendments to CCN Applications.

a. Arizona Water Company shall amend its CCN application in Docket W-01445A-06-0199 to exclude from its application the area shown on the Settlement Map as Arizona Water Company CCN Application Deletion Area.

b. Arizona Water Company shall amend its Planning Area and amend its CCN application in Docket W-01445A-06-0199 to include the area west to John Wayne Parkway, as shown on the Settlement Map as Arizona Water Company Addition to CCN Application Area.

c. Global Water - Santa Cruz Water Company shall amend its CCN application in Docket W-03576A-05-0926 to exclude the areas shown on the Settlement Map as Santa Cruz Water Company CCN Application Deletion Areas.

d. Global Water - Santa Cruz Water Company shall include within its Planning Area those areas shown on the Settlement Map as Arizona Water Company CCN Application Deletion Area which are not presently included in Global Water - Santa Cruz Water Company's CCN application in Docket W-03576A-05-0926.

e. The Concurring Water Utilities shall jointly apply for and support the Commission's approval of the Parties' Planning Areas and CCN applications as amended in accordance with the Settlement Map (the "Amended Planning Areas and CCN Applications").

4. Procedures to Enforce Settlement.

a. The Parties shall prepare and file a joint, stipulated motion identifying and jointly supporting and requesting Commission approval of the Amended Planning Areas and CCN Applications in accordance with the Commission's procedures.

b. Global shall withdraw its objections to Arizona Water Company's CCN application in Docket W-01445A-06-0199 et seq., as amended.

c. Arizona Water Company shall withdraw its objection to Global's application for approval of the transfer to Global Water - Santa Cruz Water Company and Global Water - Palo Verde Utilities Company of the CCNs of Francisco Grande Utility Company and CP Water Company.

d. Arizona Water Company shall withdraw its objections to Global Water - Santa Cruz Water Company's CCN application in Docket W-03576A-05-0926, as amended.

e. Arizona Water Company shall withdraw its objection to Global Water - Palo Verde Utilities Company's applications for wastewater CCNs in Arizona Water Company's existing CCN or its amended CCN application.

f. The Concurring Water Utilities shall jointly request and actively support Commission approval of Arizona Water Company's CCN application in Docket No. W-01445A-04-0743.

g. Following the Commission's approval of the Amended Planning Areas and CCN Applications, Arizona Water Company and Global shall jointly request the Commission to dismiss Arizona Water Company's complaint against Global, without prejudice, in accordance with the terms of this Agreement.

5. Condition of Commission Approval of Amended Planning Areas and CCN Applications; Contingencies. The terms and conditions of this Agreement are expressly subject to, among other things, the condition that the Commission approve the Amended Planning Areas

and CCN Applications. Any Party may withdraw from this Agreement and terminate any of the agreements and understandings contained herein if the Commission: (i) does not approve the Amended Planning Areas and CCN Applications; (ii) does not dismiss the complaint case as contemplated in this Agreement; or (iii) imposes conditions or restrictions in any order which any Party determines to be materially burdensome or unacceptable. If the Commission's decision or decisions in the Related Proceedings causes a Party to invoke one of the foregoing contingencies, the Parties agree to jointly apply for rehearing and, if one of the Parties deems it appropriate, support an appeal of the Commission's decision or decisions in a court of competent jurisdiction. The Parties shall communicate the substance of this provision to the Commission so that the Commission understands that the settlement is subject to the foregoing contingencies, and the joint motion to the Commission to approve the Concurring Water Utilities' Amended Planning Areas and CCN Applications shall include language providing that if the Commission fails to issue an order adopting all material terms of this Agreement, any or all of the Parties may withdraw from this Agreement.

6. Agreement Not To Interfere.

a. The Parties shall respect and not interfere with each other's existing CCNs or CCNs to be approved in the Related Proceedings as set forth on the Settlement Map.

b. The Parties shall respect and not interfere with each other's Planning Areas as set forth on the Settlement Map in the same fashion and to the same extent as they shall respect and not interfere with each other's CCNs.

c. The Parties' respect and non-interference with each other's CCNs and Planning Areas means they shall not apply for, or encourage others to apply for, water CCNs in the other

Parties' CCNs or Planning Areas. The Parties shall not directly or indirectly solicit or encourage any person, entity, landowner, or developer to request water service from any entity other than the Concurring Water Utility in whose CCN or Planning Area such water service is requested.

7. Agreement to Cooperate.

a. Global, including without limitation its subsidiary Global Water - Palo Verde Utilities Company, shall enter into an agreement with Arizona Water Company to supply available reclaimed water to Arizona Water Company, if requested, to be sold and delivered by Arizona Water Company within its CCN and Planning Area. In order to ensure that maximum efficiencies can be attained by Arizona Water Company in its deployment of potable and reclaimed water, neither Global nor Global Water - Palo Verde Utilities Company shall sell or distribute reclaimed water within Arizona Water Company's CCN or Planning Area except to Arizona Water Company, which shall be the retail provider of reclaimed water in such areas. Global Water – Palo Verde Utilities Company shall not be obligated to sell reclaimed water to Arizona Water Company in any amount in excess of the amount of reclaimed water generated in the Overlap Areas.

b. Global and Arizona Water Company shall work cooperatively in connection with Global's efforts to provide wastewater service within the western part of Arizona Water Company's CCN and Planning Area in places where the City of Casa Grande or other entity is not planning to provide wastewater service.

8. Operations in the Overlap Areas. The Managers of Arizona Water Company's Casa Grande Division and Global Water - Palo Verde Utilities Company shall meet as required to exchange information and coordinate the provision of service in the Overlap Areas.

9. Resolution of Complaint. Arizona Water Company shall withdraw the Complaint against the Global Entities as follows:

a. Following the Commission's approval of the Amended Planning Areas and CCN Applications, the Parties shall jointly request the Commission to dismiss the Complaint without prejudice.

b. The Parties agree that such disposition of the Complaint shall not be deemed to be an admission of liability, responsibility, or wrongdoing by Global nor an admission, acknowledgment, acceptance, or approval by Arizona Water Company of any of Global's activities or practices.

c. Arizona Water Company agrees not to raise or pursue allegations such as those asserted in its Complaint against Global as long as Global does not protest, oppose, or interfere with any CCN or prospective CCN of Arizona Water Company. Nothing in the foregoing prohibits either Party from filing competing CCN applications or raising or pursuing such allegations or arguments as they deem appropriate in areas outside of those set forth in the Settlement Map.

10. Fees and Costs. The Parties agree that each Party shall bear its own attorney fees, costs, expert witness fees, and other litigation expenses for each of the Related Proceedings and this Agreement. In the event a dispute arises between the Parties to enforce the terms of this Agreement, the successful or prevailing Party to such dispute shall be entitled to an award of its reasonable attorneys' fees, costs and expenses, whether or not an action is filed.

11. Advice and Assistance of Counsel. Each Party represents and warrants that the terms of this Agreement have been completely read, fully understood and voluntarily accepted, with advice of counsel, and that each of the Parties has participated in its preparation.

12. Entire Agreement. This Agreement shall constitute the entire agreement between the Parties with respect to its subject matter, and supersedes any prior verbal or written agreement. No modification of this Agreement shall be binding upon any Party unless it is in writing and executed by duly authorized representatives of the Parties.

13. Parties Affected by Agreement. The terms and conditions, representations and covenants of this Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors, personal representatives, heirs and assigns.

14. Time of the Essence. Time is of the essence and each Party shall diligently perform its obligations hereunder in a timely fashion in accordance with the provisions of this Agreement.

15. Governing Law. This Agreement shall be governed by and construed according to the laws of the State of Arizona.

16. Additional Acts. The Parties agree to cooperate fully to take all additional actions that may be necessary or appropriate to give full force and effect to the terms and intent of this Agreement.

17. Counterparts. This Agreement may be executed in any number of counterparts. Each such counterpart shall be deemed to be an original instrument, but all such counterparts together shall constitute one agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first written above.

Arizona Water Company

William M Garfield

By: WILLIAM M. GARFIELD
Its: President

Global Water Resources, LLC

By:
Its:

Global Water Inc.

By:
Its:

Global Water – Santa Cruz Water Company

By:
Its:

Global Water – Palo Verde Utilities Company

By:
Its:

Francisco Grande Utility Company

By:
Its:

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first written above.

Arizona Water Company

By:
Its:

Global Water Resources, LLC

By: Trevor T. Hill
Its: President

Global Water Inc.

By: Trevor T. Hill
Its: President

Global Water – Santa Cruz Water Company

By: Trevor T. Hill
Its: President

Global Water – Palo Verde Utilities Company

By: Trevor T. Hill
Its: President

Francisco Grande Utility Company

By: Trevor T. Hill
Its: President

CP Water Company

By: Trevor T. Hill
Its: President

Global Water - Picacho Cove Water Company

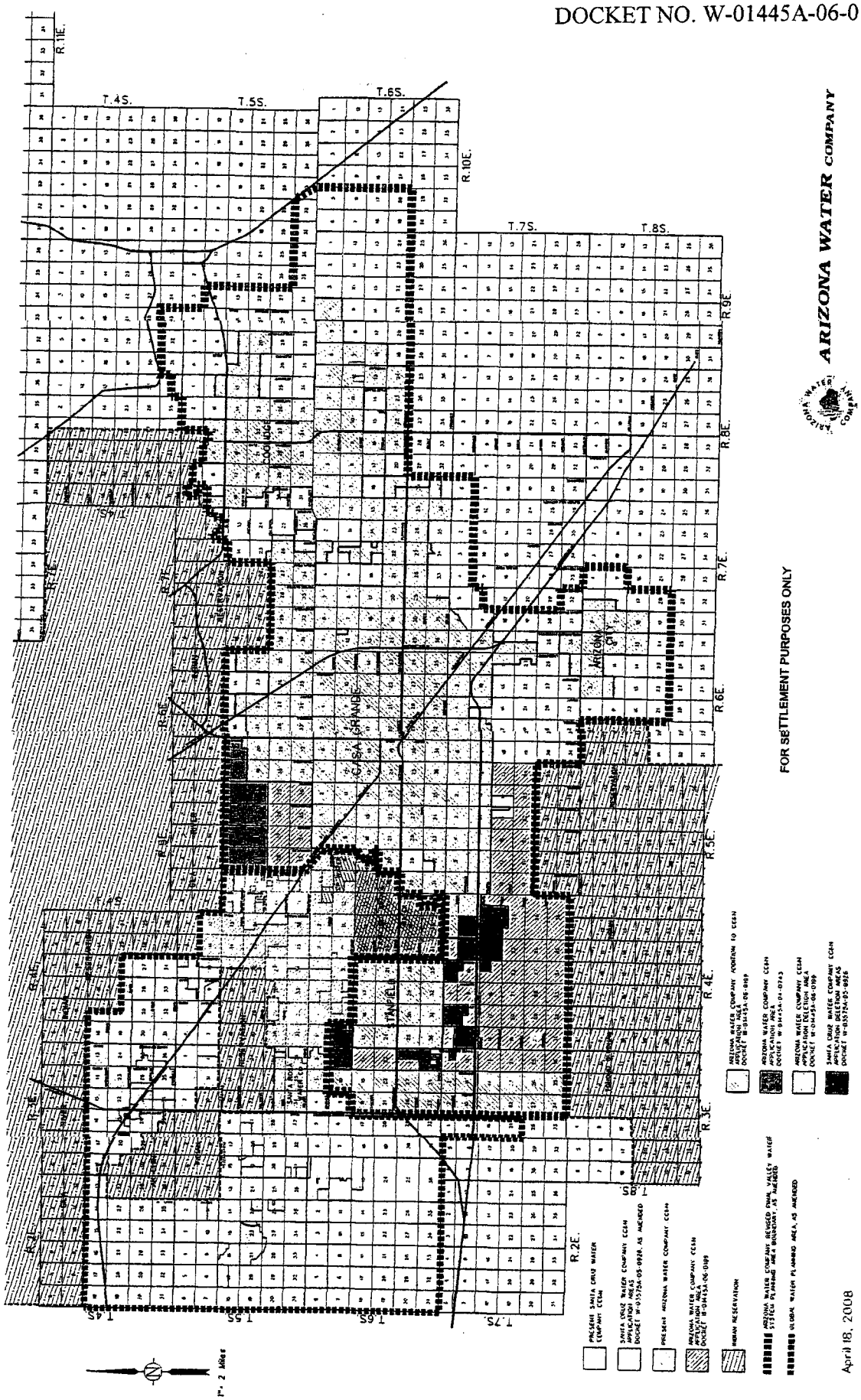
By: Trevor T. Hill
Its: President

Global Water – Picacho Cove Utilities Company

By: Trevor T. Hill
Its: President

Related Proceedings

Docket Number	Applicant or Complainant	Description
W-1445A-04-0743	Arizona Water Company	Extension of water CCN
SW-03575A-05-0926	Global Water - Palo Verde Utility Company	Extension of wastewater CCN
W-03576A-05-0926	Global Water - Santa Cruz Water Company	Extension of water CCN
W-01445A-06-0199	Arizona Water Company	Extension of water CCN
W-01445A-06-0200 et al	Arizona Water Company	Complaint by Arizona Water Company
SW-03575A-07-0300	Global Water - Palo Verde Utilities Company	Extension of wastewater CCN (for Legends development)
W-03576A-07-0300	Global Water - Santa Cruz Water Company	Extension of water CCN (for Legends development)
WS-01775A-07-0485 SW-03575A-07-0485 W-02442A-07-0485 W-03576A-07-0485	Francisco Grande Utility Company; CP Water Company; Global Water - Santa Cruz Water Company; Global Water - Palo Verde Utilities Company	Transfer of CCNs from Francisco Grande Utility Company and CP Water Co.


ARIZONA WATER COMPANY
FOR SETTLEMENT PURPOSES ONLY
April 18, 2008
1" = 2 Miles